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A Study of the Integration of Handicapped Students in the Regular Schools of the Calgary Board of Education

Final Report

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STUDENT ATTITUDES TOWARD THE HANDICAPPED

Prepared by Project Team:

Peter J. Baker
Lee Bussard
Stella A. Johnson
H. Clarence Rhodes

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11010 - 142 Street NW
Edmonton, AB
T5N 2R1

Planning and Research Branch
Alberta Education

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FOREWORD

The year 1981 has been proclaimed International Year of Disabled Persons by the General Assembly of the United Nations. The keynote theme of the year is "Full Participation and Equality." As a consequence, considerable attention is being focussed on attitudes toward handicapped people. Accordingly, this report on the Alberta study of Student Attitudes Toward the Handicapped, a project designed to increase awareness of handicapped persons and to alter attitudes, is both timely and topical.

The project was initiated by Mr. Lee Bussard of Wetaskiwin, Alberta. Mr. Bussard, who is a handicapped person, developed a proposal which he presented to the Honourable David King, Alberta Minister of Education. Mr. King expressed his interest and support for the project and referred Mr. Bussard to the Planning and Research Branch of Alberta Education for approval and funding. The Planning and Research Branch in cooperation with the Wetaskiwin School District #264, a number of business firms in Wetaskiwin, Alberta and other interested agencies facilitated the implementation of the study.

Mr. Peter J. Baker, Education Consultant with the Planning and Research Branch was appointed Project Liaison Officer. His responsibilities included: development of the research design and questionnaires, general supervision of the project and preparation of the final report of the study.

The reader is referred to Appendix A which contains a literature review and compendium of research findings related to attitudes toward the handicapped. This material was prepared by Mr. Baker and Mrs. Stella Johnson and provides background information which may be of interest to those concerned about the welfare, acceptance and integration of handicapped people into society.

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- Students, teachers and administrators who cooperated and participated in the project and provided most of the data required.

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- Mr. Peter J. Baker, Project Liaison Officer, Planning and Research Branch, for his contributions in supervision, consultation and report preparation.

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PART 1

PURPOSES, PROCEDURES AND STUDY DESIGN

PURPOSES

One purpose for the Alberta Education study of Student Attitudes Toward the Handicapped was to describe existing levels of student awareness and attitudes about handicapped persons. A second purpose was to determine if attitudes could be changed through the use of classroom presentations. Student attitudes were measured by a set of questionnaires distributed in 134 Alberta schools in 75 randomly selected communities. The questionnaires were used to determine the following: what attitudes existed toward the disabled, whether attitudes could be changed, the extent to which modified attitude levels were maintained after classroom presentations, and the most effective of two procedures used to alter student attitudes.

Research questions for the study were:

1. How knowledgeable were students about handicapped or disabled persons and what attitudes were held before classroom presentations?

2. What effects or changes in student attitudes toward disabled persons occurred as a result of involvement in classroom presentations and discussions about disabled people?

3. Were changes in attitudes differentially related to grade (elementary, junior high school or senior high school) sex, contacts with handicapped persons, and type of program presented in the classroom?

4. Will the altered attitude levels be retained over time?

5. What were the attitudes of students toward the particular classroom presentation they experienced in terms of overall evaluation, usefulness, and difficulty?

6. What were the opinions of students and teachers toward the particular presentation mode they experienced with regard to positive and negative features?

The expected outcomes of the study were to obtain a data base for decisions about:

1. the feasibility of modifying students' attitudes toward the disabled through single classroom presentations; and

2. what forms the classroom presentations should take.

STUDY DESIGN

The research questions listed above were used to guide planning of the study. They were also used subsequently to structure the analysis of the data collected and for development of this report. The questions served to delineate the problem areas addressed in the investigation; namely, what current attitude levels exist among students, can these be altered, will modified perceptions be retained, and what is the relative effectiveness and acceptability of two classroom procedures designed to change student attitudes toward the handicapped?

Samples and Sampling

A population of communities which had schools offering instruction at the elementary, junior high and senior high school levels was identified. These communities were located in north-central Alberta (mainly in Education Zones 2, 3 and 4; see map in Appendix E).

From this population of communities seventy-five were randomly selected. Communities were then randomly assigned to one of three study groups: one to a program presented by a handicapped person, a second to a classroom presentation by the regular teacher and a third to a control (no program) group. This second sampling stage resulted in schools in twenty-five communities being randomly assigned to each of these respective groups. In all, 134 schools (some offering instruction at more than one level) were selected for the study.

Within each school principals selected for participation single classroom groups of students and their teacher in grades 6, 8 and 11. A further sampling stage was employed at the school level with respect to assessing student outcomes. Questionnaires were randomly assigned to students in the target grades by school personnel. Accordingly, not all survey forms were completed by all students, i.e., each student completed only one form in each testing period. This modified matrix sampling procedure retained the representativeness of each group but reduced the testing time required of individual students. All teacher participants responded to the opinionnaire prepared to elicit their opinions.

Each community in which the schools were located had an equal probability of being placed in one of the three groups. Thus, a quasi-experimental design was employed which permitted the assumption that all three groups were initially comparable on variables relevant to the study. The design permitted a further assumption that differences among groups on the measures taken could be attributed to differences in program.

Testing Schedule

Students in the two program groups were tested on two occasions. The first assessment (Posttest 1) of their attitude toward handicapped persons occurred shortly after they had participated in their particular program, typically the following day. A second assessment (Posttest 2) used the same instrument to measure the same outcome and it was administered four to eight weeks later. Posttest 2 data were used to determine the degree of students' retention of attitudes toward the handicapped.

Students in the control (no program) classes were also tested with the same attitude scales during the first assessment period. Information from this assessment was used for comparison purposes, i.e., to determine the effects of each of the programs in altering attitudes toward the handicapped.

Also included in the first test battery for program group students were instruments for measuring the attitudes, perceptions and opinions about the instructional procedures used. Teachers in classes experiencing a program also completed an opinionnaire which elicited their perceptions about instructional procedures.

Operational Definitions

Two programs for altering students' attitudes about disabled people were investigated in the study. The relative effectiveness and acceptability of these presentation modes were assessed by use of several indicators of levels of attitude toward handicapped persons, and attitudes and opinions about instructional procedures. Each of the foregoing are defined below in operational terms.

Program 1 - Handicapped Person Presentation was a 30 to 40 minute slide, talk and question-answer period led by a handicapped person. Mr. Lee Bussard, who has cerebral palsy, developed the materials and made the presentations (See Appendix B for a detailed description of Program 1).

Program 2 - TV and Teacher Presentation also required a 30 to 40 minute period. The regular class teacher used a videotape provided by Mr. Bussard and supplemented this with a classroom discussion (See Appendix B for a detailed description of Program 2).

Students' attitudes toward disabled persons were represented by scores on the Attitudes Toward Disabled Persons (ATDP) Scale--Form A (Yuker, Block, Younng, 1960).

Students' attitudes toward program presentations were represented by the three factor scores from the Attitudes Toward School Subjects Scales (Clarke and Nyberg, 1979). The three aspects (factors) about instructional procedures used were Evaluation (general feelings), Usefulness (perceived utility) and Difficulty (ease of comprehension).

Students' opinions about program presentations were indicated by ratings on the 12-item Program Evaluation Opinionnaire developed for this purpose.

Teachers' opinions about program implementation were also indicated by ratings by these groups on the Program Evaluation Opinionnaire.

Limitations and Delimitations

The instructional presentations investigated were delimited to the two approaches described above; visual aids by means of slides or videotapes combined with talks and guidance of discussion by either a handicapped person or the regular class teacher. The main feature which differed between the two approaches was the type of adult providing the instructional leadership.

A further delimitation was with respect to the target grades--grade 6, 8 and 11 students. Younger students in elementary schools were not involved in the study.

A final delimitation concerns the population of communities sampled. Results are generalizable only to those students and teachers in north-central Alberta schools in centres providing instruction at each of elementary, junior and senior high levels.

The most noteworthy limitation relates to the adequacy and appropriateness of the instrumentation used. The Attitude Toward Disabled Persons (ATDP) scale was used extensively in the study and the major conclusions were based on scores from this measure. It has been critiqued by a number of investigators (Wallston et al., 1972; Palmerton, 1967) who think the ADTP instrument may identify the well-informed respondents who see disabled persons as actually having unique problems and needs, as having negative attitudes toward them. They view the ATDP scores as representing stereotypes in that a respondent who thinks that a disabled person is the same as one without disabilities is deemed to have a positive score. In view of these potential limitations future investigators might well supplement the ATDP by using additional, multi-factor instruments.

A final limitation is due to the feature of the experimental program which involved the same handicapped individual. Whether or not other disabled persons would be as successful is not known. Generalizations to such a group must be undertaken with caution. In contrast, sufficient teachers were involved in Program 2 (the TV-Teacher Program) to permit generalizations to all teachers in the types of communities sampled.

PART 2

FINDINGS, DISCUSSIONS AND CONCLUSIONS

The findings from the study are reported in this chapter according to the various research questions asked. A question is presented first, followed by a description and tabulation of the data appropriate for providing the answer.

QUESTION 1: WHAT WERE THE ATTITUDES TOWARD HANDICAPPED PERSONS HELD BY STUDENTS BEFORE ANY PROGRAMS WERE PRESENTED?

The answer to this question was provided by reference to the responses of the control (no program) group to individual items and the total score results on the Attitude Toward Disabled Persons (ATDP) scale. For each statement on the ATDP students recorded their attitude position according to the following scale:

Disagreement	Neutral or Uncertain	Agreement
1=strongly disagree	3=not sure but probably disagree	5=agree
2=disagree	4=not sure but probably agree	6=strongly agree

The overall response patterns (averages and percentages) by students in the control group are recorded in the right-hand columns of Table 1. ATDP items (numbered) for which a majority of students recorded quite strong feelings are enumerated below with percentages of students agreeing/not agreeing with the statement noted in parentheses.

The most strongly held attitudes about handicapped persons were as follows:

#10 They are friendly (78 per cent agreed with the statement).
#14 We cannot expect as much from them (57 per cent agreed).
#15 They can be as successful as other workers (62 per cent agreed).
#16 They can contribute to society (64 per cent agreed).
#18 They show as much enthusiasm as other workers (74 per cent agreed).
#22 The driving test for disabled persons should be more strict (69 per cent disagreed).
#23 They are usually sociable (62 per cent agreed).
#29 Most do not resent physically normal people (57 per cent agreed).
#32 They should live and work with normal people (60 per cent agreed).
#33 They are as ambitious as other people (62 per cent agreed).
#36 They are as intelligent as other people (68 per cent agreed).
#39 They aren't annoying (67 per cent agreed).

Less certainty and greater variability in attitudes were evident in student responses to a larger set of statements on the ATDP. Once

Table 1

Student Attitude Toward Disabled Person (ATDP) Scale - Form A - Results by Item and by Program:
Averages ($\bar{X}$'S) and Percentage Responses for Each ATDP Statement

Attitude Toward Disabled Person Scale (Form A)	Percentage Responses*																		
	Program Groups (First Posttest)							Program Groups on Follow-Up (Second Posttest)							No Program (Control Group)						
	$\bar{X}$	1	2	3	4	5	6	$\bar{X}$	1	2	3	4	5	6	$\bar{X}$	1	2	3	4	5	6
10) Handicapped persons are often unfriendly.	1.9	43	39	12	2	2	2	1.9	40	41	14	3	2	1	2.0	33	45	14	3	4	1
11) Disabled people should not have to compete for jobs with physically normal persons.	3.3	11	27	16	15	23	7	3.3	10	27	19	15	22	7	3.6	9	22	18	15	27	9
12) Handicapped people are more emotional than other people.	3.2	6	29	28	21	14	3	3.1	7	27	27	25	11	2	3.4	5	26	23	24	17	5
13) Most handicapped people are more self-conscious than other people.	3.8	5	13	19	32	27	5	3.7	3	15	24	29	24	5	3.8	3	13	19	33	27	4
14) We should expect just as much from the handicapped as from non-handicapped persons.	3.2	10	32	17	15	18	8	3.3	10	30	19	13	20	8	2.8	18	39	16	7	13	6
15) Disabled workers cannot be as successful as other workers.	2.2	39	32	10	6	9	4	2.3	34	35	11	6	8	5	2.6	30	32	12	8	13	5
16) Handicapped or disabled persons usually do not make much of a contribution to society.	2.1	37	36	15	7	3	2	2.2	35	35	17	8	4	2	2.3	32	32	18	11	6	2
17) Most non-disabled people would not want to marry a physically disabled person.	3.1	13	24	21	23	17	2	3.2	11	23	23	22	18	4	3.6	8	19	18	26	23	7
18) Handicapped people show as much enthusiasm as other people.	5.0	3	2	3	9	47	36	5.0	2	2	3	12	47	34	4.8	2	5	6	14	49	24

Table 1 (Continued)

Attitude Toward Disabled Person Scale (Form A)	Percentage Responses*																		
	Program Groups (First Posttest)							Program Groups on Follow-Up (Second Posttest)							No Program (Control Group)						
	$\bar{X}$	1	2	3	4	5	6	$\bar{X}$	1	2	3	4	5	6	$\bar{X}$	1	2	3	4	5	6
19) Handicapped persons are usually more sensitive (touchy) than other people.	3.4	5	24	22	26	18	6	3.5	6	20	25	24	19	6	3.7	5	16	22	29	21	8
20) Severely disabled persons are usually untidy.	4.5	2	6	9	29	38	17	4.4	2	7	11	26	38	17	4.2	2	10	15	25	36	12
21) Most handicapped people feel that they are as good as other people.	2.8	17	33	21	13	13	3	2.8	18	32	24	14	11	2	3.0	14	33	28	15	8	3
22) The driving test given to a disabled person should be more severe (strict or harder) than the one given to the non-disabled.	2.3	37	33	12	5	7	4	2.3	38	31	12	8	8	3	2.3	37	32	11	8	8	4
23) Handicapped persons are usually sociable.	4.8	2	3	4	17	52	22	4.7	1	3	5	20	51	20	4.5	2	5	8	23	48	14
24) Disabled persons usually are not as conscientious as physically normal persons.	2.9	15	31	25	17	11	2	3.0	12	31	26	18	11	2	3.0	12	28	23	20	13	3
25) Severely disabled persons probably worry more about their health than those who have minor disabilities.	3.8	4	16	17	30	28	5	3.7	4	16	20	28	28	5	3.9	4	16	19	25	27	10
26) Most handicapped people are not dissatisfied (displeased) with themselves.	4.0	4	10	17	28	33	8	4.0	4	13	16	27	33	8	3.9	3	11	20	29	30	7
27) There are more misfits among disabled people than among non-disabled people.	2.9	16	29	23	18	12	2	2.9	16	26	27	18	12	2	3.1	13	26	25	19	12	4
28) Most handicapped people do not get discouraged easily.	3.8	4	16	20	25	24	11	3.8	5	16	22	24	24	9	3.6	6	19	24	24	22	6

Table 1 (Continued)

Attitude Toward Disabled Person Scale (Form A)	Percentage Responses*																		
	Program Groups (First Posttest)							Program Groups on Follow-Up (Second Posttest)							No Program (Control Group)						
	$\bar{X}$	1	2	3	4	5	6	$\bar{X}$	1	2	3	4	5	6	$\bar{X}$	1	2	3	4	5	6
29) Most disabled persons resent (take offense at) physically normal people.	2.3	27	37	20	10	4	2	2.4	25	34	26	9	6	1	2.6	21	36	22	11	7	3
30) Disabled children should compete with physically normal children.	3.5	10	22	18	20	23	7	3.5	9	25	16	20	22	8	3.3	11	27	15	18	21	7
31) Most handicapped persons can take care of themselves.	4.4	1	8	9	28	43	12	4.4	1	7	10	26	44	12	4.0	3	12	17	28	34	7
32) It would be best if handicapped people would live and work with normal people.	4.7	2	5	8	19	39	27	4.7	2	6	7	20	40	26	4.5	2	8	8	23	38	22
33) Most severely disabled people are just as ambitious as physically normal people.	4.8	2	4	7	18	43	28	4.7	2	5	6	20	42	26	4.6	1	6	10	19	40	22
34) Handicapped persons are just as self-confident as other people.	4.7	1	3	8	24	47	18	4.6	1	4	8	24	46	16	4.4	2	8	11	26	42	13
35) Most handicapped people want more affection (love) and praise than other people.	3.4	7	23	25	23	15	8	3.3	8	25	26	20	15	8	3.6	6	18	24	24	18	10
36) Physically disabled persons are often less intelligent than non-disabled ones.	2.1	44	29	12	8	3	3	2.1	43	28	14	8	4	3	2.2	40	28	13	10	6	3
37) Most handicapped people are different from people who are not handicapped.	3.0	18	29	16	13	19	4	3.2	14	27	17	16	22	4	3.2	12	26	20	14	22	6

Table 1 (Continued)

Attitude Toward Disabled Person Scale (Form A)	Percentage Responses*																			
	Program Groups (First Posttest)							Program Groups on Follow-Up (Second Posttest)							No Program (Control Group)						
	$\bar{X}$	1	2	3	4	5	6	$\bar{X}$	1	2	3	4	5	6	$\bar{X}$	1	2	3	4	5	6
38) Disabled persons don't want any more sympathy than other people.	4.5	4	6	9	18	44	20	4.4	3	9	9	19	39	20	4.1	4	10	13	27	34	12
39) The way handicapped people act is irritating (annoying).	2.0	45	33	11	6	3	3	2.2	34	37	15	7	4	3	2.3	36	31	15	8	6	5

* NOTE: The numerals correspond to the following Rating Scale on ATDP:

1 - STRONGLY DISAGREE
2 - DISAGREE
3 - NOT SURE BUT PROBABLY DISAGREE
4 - NOT SURE BUT PROBABLY AGREE
5 - AGREE
6 - STRONGLY AGREE

$\bar{X}$ - MEAN OR AVERAGE RATING ON THE 6-POINT SCALE

again, the results reported below are the ratings by students in the control group as recorded in Table 1. The ATDP item number is noted and the percentage of students who had neutral or uncertain perceptions are noted within the parentheses.

Students' attitudes characterized by high variability (low agreement) and less certainty were that handicapped persons:

#11 Should compete for jobs with normal persons (33 per cent uncertain).
#12 Are more emotional than others (47 per cent uncertain).
#13 Are more self-conscious than other people (52 per cent uncertain).
#19 Are more sensitive (touchy) than others (51 per cent uncertain).
#21 Feel they are as good as other pople (43 per cent uncertain).
#24 Are not as conscientious as others (44 per cent uncertain).
#25 Worry more about health (if severely disabled) than those with minor disabilities (44 per cent uncertain).
#26 Are not dissatisfied (displeased) with themselves (49 per cent uncertain).
#27 Can be described as having more misfits than among the non-disabled (44 per cent uncertain).
#28 Do not get discouraged easily (48 per cent uncertain).
#30 If children, should compete with physically normal children (33 per cent uncertain).
#31 Can take care of themselves (45 per cent uncertain).
#35 Want more affection (love) and praise than other people (48 per cent uncertain).
#37 Are different from people who are not handicapped (44 per cent uncertain).
#38 Don't want any more sympathy than other people (40 per cent uncertain).

Greatest divisions in students' opinions about handicapped persons were noted in the responses of the no-program group (see right hand column Table 1) with respect to the following ATDP scale statements:

#11 Disabled people should not have to compete for jobs with physically normal persons (31 per cent disagree, 36 per cent agree).
#17 Most non-disabled people would not want to marry a physically disabled person (27 per cent disagree, 30 per cent agree).
#37 Most handicapped people are different from people who are not handicapped (38 per cent disagree, 28 per cent agree).

Attitudes Toward Disabled Persons for Each Grade According to Sex of Student and Acquaintanceship/Contacts with Handicapped People

To complete the description of attitudes toward handicapped persons held by students in answer to Question 1 a number of additional comparisons were made. For each of grades 6, 8 and 11 the average scores on the ATDP were used for the following comparisons: boys and girls; awareness of handicapped persons in the community (yes/no); degree of acquaintanceship with a handicapped person (know very well/fairly well/not at all); and presence of a handicapped person in the school (yes/no/don't know). Table 2 provides the comparison data.

The results from the comparisons between groups are as follows:

Table 2

Attitude Toward Disabled Persons For Each Grade According To Sex and Acquaintanceship/Contacts With Handicapped People

Comparisons Between Group Averages

Descriptive Statistics	Grade 6			Grade 8			Grade 11		
	Boys	Girls	Difference	Boys	Girls	Difference	Boys	Girls	Difference
N	122	119		126	139		86	126	
$\bar{X}$	3.8	4.0	0.2**	3.8	4.3	0.5***	4.0	4.2	0.2**
SD	.56	.50		.59	.58		.45	.51	
Aware of Handicapped Person in Community?									
	Yes	No	Difference	Yes	No	Difference	Yes	No	Difference
N	182	58		179	85		158	54	
$\bar{X}$	3.9	3.9	0.0	4.1	4.0	0.1	4.1	4.0	0.1
SD	.54	.54		.61	.66		.49	.49	
Degree of Acquaintanceship With A Handicapped Person									
	Very Well	Nil	Difference	Very Well	Nil	Difference	Very Well	Nil	Difference
N	79	70		35	143		31	94	
$\bar{X}$	3.9	3.9	0.0	4.5	4.0	0.5***	4.1	4.0	0.1
SD	.65	.43		.56	.62		.40	.46	
	Fairly Well	Nil	Difference	Fairly Well	Nil	Difference	Fairly Well	Nil	Difference
N	92	92		87	43		87	94	
$\bar{X}$	3.9	3.9	0.0	4.1	4.0	0.1	4.2	4.0	0.2**
SD	.51	.65		.62	.62		.55	.46	
Presence of a Handicapped Person in the School*									
	Yes	No	Difference	Yes	No	Difference	Yes	No	Difference
N	137	35		58	149		87	84	
$\bar{X}$	3.9	4.0	0.1	4.1	4.1	0.0	4.1	4.1	0.0
SD	.56	.38		.66	.62		.46	.46	

* Note: comparisons between "don't know" and "no" groups' averages showed no significant differences

** $p < .01$

*** $p < .001$

1. In all grades girls were more positive than boys relative to their general attitude toward the handicapped.

2. Whether or not students were aware of handicapped people in the local community was not a significant factor in general attitudes at any grade level. A large majority of students at each grade level reported that they were aware of handicapped people in their communities.

3. Only two of the comparisons (at the secondary school level) concerning how well students knew a handicapped person yielded significant differences: grade 8 students who knew a handicapped person very well were more positive than those who had no acquaintance, and grade 11 students who knew a disabled person fairly well had higher average ATDP scores than those with nil acquaintance. The other four comparisons in this section of Table 2 show no significant differences. At the secondary school level only a very small minority report knowing a disabled person very well.

4. It has been suggested that the presence of handicapped students in a school ought to have some impact on regular class students' perceptions about the disabled persons. The final section of Table 2 indicates no significant differences among averages for groups reporting "yes," "no" and "don't know" relative to whether or not there was a handicapped student in the school. The numbers of students (N) imply a much higher degree of integration of the handicapped in elementary schools than in secondary schools.

A final set of comparisons of average scores on the ATDP was made according to residence location of students (not displayed in Table 2). Only one pair-wise comparison showed a significant difference: junior high school students who live in a large city had a more positive attitude toward the handicapped than those who live on farms. This finding was not obtained at grade 6 or grade 11. None of the other differences among groups, including those from small cities and towns, were significant.

Conclusions Concerning Students' Attitudes Toward Handicapped Persons

In general, Alberta students in grades 6, 8 and 11 tended to be optimistic and positive in their perceptions about handicapped groups. Several differences in response patterns were noted according to the type of statement on the ATDP scale.

Most strongly held attitudes were with respect to statements describing characteristics of handicapped persons which could more readily be inferred from direct observation of their overt actions. A moderate majority (60 to 70 per cent) of the students were positive or optimistic concerning traits of the handicapped such as the following: friendly, potentially successful and productive, sociable, ambitious, enthusiastic, self-confident, intelligent, and acceptable as group members. Only a small minority (an average of 13 per cent) of the students responded with negative and pessimistic ratings to these types of statements. These

results will be encouraging to those concerned with negative stereotypes since most students don't view the handicapped this way. The minority that do will remain a concern.

Attitudes for which there is less unanimity are reflected in the second set of characteristics noted above. For these, from 45-55 per cent of the students registered uncertainty about their ratings. Most of the statements in this set required the raters to empathize with the handicapped. Apparently many students found it difficult to respond in terms of the views held by the handicapped. The characteristics of the disabled reflected by many of these types of statements would not be as clearly manifested in behaviors. Traits of this type include high emotionality, self-consciousness, hypersensitivity, worrisomeness, needing affection and sympathy, and self-dependence. The high degree of uncertainty about what handicapped persons think and how they feel suggests the need for contacts and communication with the disabled.

Conclusions concerning sharp divisions in opinion about handicapped people might well be that many students tended to respond either as idealists or realists. Those that assumed an idealistic stance may have emphasized what ought to be. Those holding opposing views were likely more realistic since they may have interpreted a statement more literally or emphasized practical considerations.

Only three statements on the ATDP produced a sharply divided result. They pertained to: 1) the disabled competing for jobs with physically normal people, 2) non-disabled marrying physically disabled and, 3) differences between the disabled and non-disabled.

Conclusions concerning differences in attitudes according to sex of the student are that girls apparently have greater empathy and optimism toward the handicapped than boys. This supports the conventional wisdom that females, on average, are more person-centred than males.

Conclusions about the effects of contact with handicapped persons are that proximity and familiarity frequently have no impact on general attitude. The single exception occurs at the adolescent age level where the small minority of students who know a handicapped person well (junior high school) and fairly well (senior high school) have a more positive and optimistic general feeling toward the handicapped. This may reflect the tendency of teenagers to form social groups and cliques, and to view those who are members of the social network more favorably than non-members.

A surprising finding is that presence or absence of a handicapped student in the school is unrelated to general attitude as measured by the ATDP. These results offer no support to lobbyists who are promoting increased school integration in order to modify attitudes in the majority group.

QUESTION 2: CAN ATTITUDES TOWARD HANDICAPPED PERSONS BE CHANGED BY MEANS OF A SINGLE CLASSROOM PRESENTATION AND DISCUSSION? WHAT EFFECTS OR CHANGES IN STUDENTS' ATTITUDES OCCURRED?

The answers to these questions were obtained by administering the Attitude Toward Disabled Persons (ATDP) Scale to the control (no program) groups and to the two program groups soon after the presentation. Differences favouring program groups over control groups on average ATDP scores were attributed to the program. That is, if the program group achieved higher scores then the difference could be considered a result of the programs.

Table 3 provides summary information about a general attitude change which occurred as a result of the single classroom presentations and discussions. To answer the first question posed above, the results for the two types of programs (handicapped person and TV plus teacher presentations) were combined and comprised the data for the "Program" groups. The average total score for this treatment group was compared with the average for the control (no program) group.

Table 3

Comparisons of Averages on the Attitude Toward Disabled Persons Scale: Program (Handicapped Person Plus TV-Teacher Presentation) Versus No Program

Group	N	Average (Mean Score) $\bar{X}$	Standard Deviation SD
Program (Combined Scores: Handicapped Person Plus Teacher	768	4.27	0.542
No Program (Control Group)	769	4.02	0.564
Differences		0.25***	0.022

*** $p < .001$

Note: N = number of students tested
$\bar{X}$ = mean or average score
SD = standard deviation; an index describing the spread or variability of scores

The difference in average scores (0.25) noted in Table 3 indicates that overall, a single-presentation program had a significant impact on students' general attitude toward handicapped persons. A relatively short presentation was successful in altering the general attitude in a positive direction.

What specific effects can be attributed to the combined programs presented? The far-right column in Table 4 displays the differences in averages between the Posttest 1 (combined program) group and the control (no-program) group for each item on the ATDP scale. Those statements from Table 4 which prompted significantly different responses between program and control groups are noted in Table 5.

A significant change attributable to program was noted in the ratings of ten statements on the 30 item ATDP Scale. Sixty per cent (six) of the items were classified as representing attitudes which were most strongly held by non-program students. Items in this category are numbers 14, 15, 23, 34 and 39. Relatively strongly held attitudes such as students' expectations for the handicapped persons (#18, 23, 34, 39) were altered by the classroom presentations. The programs were successful in enhancing students' optimism about the handicapped persons' prospects for success and in reducing differential expectations between disabled and non-disabled groups. Perceptions were altered by the programs concerning certain characteristics of the handicapped population; ratings for enthusiasm, sociability, and self-confidence were increased and there was increased disagreement that their behavior annoys others.

Table 5 records that two of the three ATDP statements on which opinion was most divided were rated differentially by program and non-program groups. There was increased disagreement by the program group that non-disabled people would not want to marry disabled persons (Item #17). There was also increased disagreement with the notion that most handicapped people are different from the non-handicapped (Item #37).

Finally, two ATDP statements where non-program ratings were highly variable and a lack of consensus was evident had ratings altered as a result of program intervention. These were that most handicapped people do not get discouraged easily (Item #28, increase in disagreement) and that disabled persons don't want more sympathy than other people (Item #38, increase in agreement).

Conclusions about the effects of program interventions are as follows:

1. A general attitude shift in the direction of more optimism and increasingly positive perceptions about the handicapped population was accomplished by the programs.

2. Programs of relatively short duration (one hour) can significantly alter general and specific attitudes.

3. A larger proportion of strongly-held attitudes can be altered by such programs than attitudes about which there is less consensus and greater variability in opinion. An exception is the type of attitude where sharp divisions in opinion exists, i.e., where large minorities hold diametrically opposed views. For two of three ATDP statements of this type a significant shift of attitude was noted.

Table 4

Student Attitude Toward Disabled Persons (ATDP) Scale Results by Item and Program Versus No-Program: Differences in Mean Responses on First Post-Test and Second Post-Test Versus Mean Responses of No-Program Group

Attitude Toward Disabled Person Scale (Form A)	Means			Mean Differences*		
	First Post-Test	Second Post-Test	No-Program	Post-Test 2 Minus Post-Test 1	Post-Test 2 Minus No-Program	Post-Test 1 Minus No-Program
10) Handicapped persons are often unfriendly.	1.87	1.89	2.04	.02	(.15)	(.17)
11) Disabled people should not have to compete for jobs with physically normal persons.	3.34	3.34	3.59	NIL	(.25)	(.25)
12) Handicapped people are more emotional than other people.	3.18	3.12	3.36	(.06)	(.24)	(.18)
13) Most handicapped people are more self-conscious than other people.	3.77	3.70	3.80	(.07)	(.10)	(.03)
14) We should expect just as much from the handicapped as from non-handicapped persons.	3.21	3.26	2.76	.05	.50	.45***
15) Disabled workers cannot be as successful as other workers.	2.26	2.34	2.56	.08	(.22)	(.30)***
16) Handicapped or disabled persons usually do not make much of a contribution to society.	2.09	2.16	2.33	.07	(.17)	(.24)
17) Most non-disabled people would not want to marry a physically disabled person.	3.14	3.24	3.57	.10	(.33)	(.43)***

Table 4 (Continued)

Attitude Toward Disabled Person Scale (Form A)	Means			Mean Differences*		
	First Post-Test	Second Post-Test	No-Program	Post-Test 2 Minus Post-Test 1	Post-Test 2 Minus No-Program	Post-Test 1 Minus No-Program
18) Handicapped people show as much enthusiasm as other people.	5.04	5.01	4.76	(.03)	.25	.28***
19) Handicapped persons are usually more sensitive (touchy) than other people.	3.43	3.47	3.68	.04	(.21)	(.25)
20) Severely disabled persons are usually untidy.	4.46	4.41	4.19	(.05)	.22	.27***
21) Most handicapped people feel that they are as good as other people.	2.80	2.76	2.79	(.04)	(.03)	.01
22) The driving test given to a disabled person should be more severe (strict or harder) than the one given to the non-disabled.	2.26	2.27	2.32	(.02)	(.05)	(.06)
23) Handicapped persons are usually sociable.	4.79	4.74	4.52	(.05)	.22	.27***
24) Disabled persons usually are not as conscientious as physically normal persons.	2.85	2.93	3.03	.08	(.10)	(.18)
25) Severely disabled persons probably worry more about their health than those who have minor disabilities.	3.79	3.75	3.86	(.04)	(.11)	(.07)
26) Most handicapped people are not dissatisfied (displeased) with themselves.	3.97	3.96	3.94	(.01)	.02	.03

Table 4 (Continued)

Attitude Toward Disabled Person Scale (Form A)	Means			Mean Differences*		
	First Post-Test	Second Post-Test	No-Program	Post-Test 2 Minus Post-Test 1	Post-Test 2 Minus No-Program	Post-Test 1 Minus No-Program
27) There are more misfits among disabled people than among non-disabled people.	2.89	2.89	3.05	NIL	(.16)	(0.16)
28) Most handicapped people do not get discouraged easily.	3.81	3.75	3.55	(.06)	.20	.26***
29) Most disabled persons resent (take offense at) physically normal people.	2.34	2.42	2.58	.08	(.16)	(.24)
30) Disabled children should compete with physically normal children.	3.47	3.47	3.32	NIL	.15	.15
31) Most handicapped persons can take care of themselves.	4.39	4.40	3.98	.01	.42	.41***
32) It would be best if handicapped people would live and work with normal people.	4.67	4.68	4.53	.01	.15	.14
33) Most severely disabled people are just as ambitious as physically normal people.	4.79	4.73	4.58	(.06)	.15	.21
34) Handicapped persons are just as self-confident as other people.	4.69	4.58	4.37	(.11)	.21	.32***
35) Most handicapped people want more affection (love) and praise than other people.	3.38	3.31	3.62	(.07)	(.31)	(.24)

Table 4 (Continued)

Attitude Toward Disabled Person Scale (Form A)	Means			Mean Differences*		
	First Post-Test	Second Post-Test	No-Program	Post-Test 2 Minus Post-Test 1	Post-Test 2 Minus No-Program	Post-Test 1 Minus No-Program
36) Physically disabled persons are often less intelligent than non-disabled ones.	2.06	2.12	2.23	.06	(.11)	(.17)
37) Most handicapped people are different from people who are not handicapped.	2.97	3.20	3.25	.23	(.05)	(.28)***
38) Disabled persons don't want any more sympathy than other people.	4.49	4.43	4.13	(.06)	.30	.36***
39) The way handicapped people act is irritating (annoying).	1.97	2.18	2.32	.21	(.14)	.35***

* NOTE: Brackets indicate directional differences only.

* $p < .05$
** $p < .01$
*** $p < .001$

Table 5

Student Attitude Toward Disabled Persons (ATDP) Scale Results By Item and Program Versus No-Program: Differences in Mean Responses on First Post Test Administered Immediately Following Program Presentation

Attitude Toward Disabled Person Scale (Form A)		Means (Averages)*		
		Combined Program	No-Program	Difference
Item No.	Items#	First Post Test	Control Group	Post Test 1 Minus No-Program
14)	We should expect just as much from the handicapped as from non-handicapped persons.	3.21	2.76	.45***
15)	Disabled workers cannot be as successful as other workers.	2.26	2.56	-.30**
17)	Most non-disabled people would not want to marry a physically disabled person.	3.14	3.57	-.43***
18)	Handicapped people show as much enthusiasm as other people.	5.04	4.76	.28***
23)	Handicapped persons are usually sociable.	4.79	4.52	.27***
28)	Most handicapped people do not get discouraged easily.	3.81	3.55	.26***
34)	Handicapped persons are just as self-confident as other people.	4.69	4.37	.32***
37)	Most handicapped persons are different from people who are not handicapped.	2.97	3.25	.28***
38)	Disabled persons don't want any more sympathy than other people.	4.49	4.13	.36***
39)	The way handicapped people act is irritating (annoying).	1.97	2.32	.35***

** $p < .01$ # Items are extracted from Table 4.

*** $p < .001$

* Note: the numerals correspond to the following Rating Scale on ATDP:

1 - Strongly Disagree
2 - Disagree
3 - Not sure but probably disagree
4 - Not sure but probably agree
5 - Agree
6 - Strongly Agree

QUESTION 3: WERE CHANGES IN ATTITUDE DIFFERENTIALLY RELATED TO GRADE LEVEL (ELEMENTARY, JUNIOR HIGH OR SENIOR HIGH SCHOOL), SEX, CONTACTS WITH HANDICAPPED PERSONS OR TYPE OF PROGRAM PRESENTED?

A number of analyses were undertaken to determine if characteristics of student respondents and type of program were related to general attitude change. It was thought that grade level (grade 6, 8 or 11), sex (boy and girl), acquaintanceship with a handicapped person in the school or community, and the type of program (by handicapped persons or via TV-teacher) might be associated with attitude change. In addition, interaction effects on attitude change of grade and type of program with sex of student and their contacts/acquaintanceships with handicapped people were examined. With respect to interactions it was felt that differential results might be obtained from various combinations of grade and program, within-grade sex and program, and within-grade contacts/acquaintanceship with handicapped persons and type of program. That is, students might have responded differently because of their sex, grade or degree of familiarity/contacts with handicapped persons.

Type of Program and Attitude Change

Question #2 asked whether or not a relatively short (single-period) classroom presentation and discussion could affect a measurable student change in attitudes toward handicapped persons. The answer, based on data from the combined program groups, was that a general attitude and specific attitudes could be altered by these means.

Part of Question #3 addressed the same concern as Question #2 but with respect to type of program. Is one type of program more effective than another? Specifically, are there differences in effect between a program presented by a handicapped person and one presented by means of audio-visual aids and the regular class teacher? Table 6 displays the findings relative to a general attitude as indicated by the total scale on the Posttest 1 administration of the Attitude Toward Handicapped Persons (ATDP) instrument (immediately after presentation). Table 7 provides comparable information but compares the programs on the ATDP measure taken a month to six weeks later.

The results noted on Table 6 indicate that the presentation by a teacher using the audio-visual kit provided had a slight, but significantly greater immediate impact than the live presentation by a handicapped person. However, this finding is confounded by the fact that the same handicapped person who gave the live presentation also appeared frequently on the screen and was heard in the audio-visual portion of the teachers' presentations. Apparently visual and auditory representations of the handicapped person may have had an equal or greater effect than a personal presentation.

Table 6

Attitude Toward Disabled Persons: Total Scale Averages
By Program Immediately After Presentation

Type of Program Presentation	N	Mean (Average)	Standard Deviation (Spread of Scores)
Handicapped Person	423	4.22	0.52
TV and Teacher	325	4.34	0.56
Difference		0.12***	

*** $p < .001$

Longer-term effects are the ultimate goal of any intervention program. Table 7 indicates that general attitude, as measured by the ATDP a month or six weeks after the presentation, was maintained by the handicapped person presentation group. However, the TV-teacher presentation group suffered a decline. Accordingly, no significant difference between treatment groups was discernable a month or so later. When medium-term effects were considered there was no difference in general attitude between program groups.

Table 7

Attitude Toward Disabled Persons: Total Scale Averages
by Program One Month After Presentation

Type of Program Presentation	N	Mean (Average)	Standard Deviation (Spread of Scores)
Handicapped Person	862	4.23	0.54
TV and Teacher	544	4.24	0.53
Difference		0.01	

Note: difference is not significant

Table 8 averages ($\bar{X}$s) provide another view of program effects after the elapse of a month or six weeks time. The change scores (differences between experimental and control groups' averages) of 0.21 and 0.22 for Handicapped Person and TV-Teacher groups respectively, indicate the amount of gain to be credited to each intervention. The programs contributed equally to a general attitude change when longer-term effects were analyzed.

Table 8

Longer-Term Change in General Attitude Toward Handicapped Persons Attributable to Each Program

Group			Average ATDP Change Score (Program Group Minus Control)
Handicapped Person	N	862	
	$\bar{X}$	4.23	0.21
	SD	0.54	-0.02
TV and Teacher	N	544	
	$\bar{X}$	4.24	0.22
	SD	0.53	-.01
No Program (Control)	N	769	
	$\bar{X}$	4.02	
	SD	0.56	

The variabilities or spreads of scores (standard deviations or SDs) noted in Table 8 are very similar for all three groups. This indicated that there were no changes in variability or degree of consensus in general attitude toward the handicapped which could be attributed to program. That is, opinions and feelings remained as varied and widely distributed after intervention as before even though there was an upward positive shift in the average response.

Attitude Change and Students' Grade

Average change scores based on total scores on the ATDP (program group averages minus control group averages) were computed to determine attitude change attributable to each program. The differences on measures taken immediately after presentation which could be credited to each program at the various grade levels are recorded in Table 9.

The only non-significant difference occurred at grade 8 where students attending the presentation by a handicapped person did not experience a significant shift in general attitude.

Table 9

Attitude Change For Each Program According to Grade

Program Presentation By	Attitude Change: Average Change Scores on ATDP			
	Grade 6	Grade 8	Grade 11	Total
Handicapped Person	0.3***	0.1	0.2***	0.2***
TV and Teacher	0.4***	0.2**	0.3***	0.3***

** $p < .01$
*** $p < .001$

Attitude Change and Sex of Student

Changes in general attitude toward handicapped persons were calculated according to sex of respondent for each of the experimental programs within each grade. Table 10 displays the average change scores identified with each program.

A sex-grade interaction effect was noted in grade 8. Junior high school girls responded differently than boys to both programs; males experienced a significant attitude shift and females did not.

At grade 11 a sex-grade-program effect was observed since senior high school girls enrolled in the handicapped person presentation groups did not show an immediate attitude change. However, senior high school boys in that group experienced an immediate, positive shift in general attitude. Both boys and girls in grade 11 immediately improved their attitudes from the TV-Teacher program.

Table 10

Attitude Change For Each Grade According to Sex of Respondent and Program

Program Presentation By	Attitude Change: Average Change Scores on ATDP					
	Grade 6		Grade 8		Grade 11	
	Boys	Girls	Boys	Girls	Boys	Girls
Handicapped Person	0.3***	0.2*	0.4***	-0.1	0.2*	0.1
TV and Teacher	0.6***	0.3***	0.4***	0.1	0.3***	0.3***

** $p < .01$
*** $p < .001$

Attitude Change and Students' Contacts/Familiarity With Handicapped Persons

Were awareness of, and familiarity and contacts with handicapped persons related to changes in attitude? The average change scores for student groups variously categorized by type of contact with handicapped persons provided the information required to answer this question (Table 11).

Senior high school students' attitude change was not significantly affected by their awareness of handicapped persons in the community or the school. With respect to degree of awareness of handicapped persons in the community a clear distinction was recorded in change scores in Table 11 for junior high school students; those who were aware had a positive attitude shift and those who were unaware experienced no change. The results for grade six were mixed.

Awareness of a handicapped student in the school had no significant effect on attitude change in grade 11 and mixed results in the elementary and junior high school. Overall, the generalization is that integration has no consistent effect on changes in attitude toward the handicapped.

The final section of Table 11 displays change scores for groups according to how well acquainted they were with a handicapped person. At the secondary level relatively few students in either junior or senior high reported knowing a handicapped person very well. For junior high students a differential effect was noted between those acquainted with a handicapped person fairly well and not at all; those with some acquaintance experienced a positive shift and those not acquainted had no significant change. No differential between "fairly well" and "nil" acquaintanceship was noted for grade 11 students. At the elementary level how well students knew a handicapped person was generally unrelated to attitude change.

Concluding Statements Concerning Factors Affecting Attitude Change

A number of general conclusions are tenable concerning the association of program variables and other factors with changes in ATDP total scores.

Program

1. Both types of program had an immediate, positive effect on general attitude toward handicapped persons.

2. The TV-Teacher program had a small but significantly greater immediate effect than the change noted for the handicapped person's live presentation.

3. However, there was no difference in attitude change between programs when medium-term (one month or six weeks' time elapse) effects were analyzed.

Table 11

Attitude Changes By Program Within Each Grade According to Students' Awareness, Familiarity and Contacts Re: Handicapped Persons

Program Presentation By	Attitude Change: Average Change Scores on ATDP								
	Grade 6			Grade 8			Grade 11		
Awareness of Handicapped Person in Community									
	Yes	No		Yes	No		Yes	No	
Handicapped Person	0.3***	0.1		0.2**	-0.1		0.2**	0.2***	
TV and Teacher	0.5***	0.4***		0.2*	0.1		0.3***	0.3***	
Presence of Handicapped Student in the School									
	Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know
Handicapped Person	0.3***	0.3**	0.1	0.1	0.1	0.1	0.2*	0.2*	0.3*
TV and Teacher	0.5***	0.2	0.3*	0.0	0.3**	0.4*	0.4***	0.3***	0.5*
Acquaintanceship With a Handicapped Person									
	Very Well	Fairly Well	Nil	Very Well	Fairly Well	Nil	Very Well	Fairly Well	Nil
Handicapped Person	0.4***	0.2*	0.2*	-0.2	0.2*	0.1	0.3	0.2*	0.2*
TV and Teacher	0.7***	0.4***	0.2	-0.2	0.2*	0.2	0.2	0.4***	0.4**

* $p < .05$
** $p < .01$
*** $p < .001$

Accordingly, if longer-term benefits to students are used as the criteria, either type of program would be equally beneficial in effecting changes in general attitude toward the handicapped.

Sex of Student and Immediate Attitude Change

4. In the elementary school both boys and girls were similarly affected by both programs and experienced positive gains in general attitude.

5. In junior high school a sharp difference was noted between boys and girls with respect to change scores. In both programs boys improved their attitudes and the girls did not (Table 10).

6. At the senior high school level grade 11 girls were apparently not significantly affected by the live presentation by a handicapped person. All other senior groups improved their scores.

In general, sex of respondent is an important variable in influencing this particular attitude change. Since the entry-levels on the ATDP were higher for girls than boys (i.e., there is less room for gains by girls) this may account for the relatively greater difficulty in altering adolescent females' attitudes. However, there may be other explanations not accounted for by the data. Accordingly, additional study on sex differences seems warranted--particularly with respect to junior high school girls since neither program resulted in an attitude shift for this group.

Awareness of Handicapped in Community

7. Once again the junior high school group demonstrated differences, this time with respect to whether or not students knew of a handicapped person in the community. Only those in grade 8 who had such an awareness experienced a positive attitude shift. Perhaps the origin of this differential awareness is also a significant factor in facilitating or inhibiting the attitude change. Further study is required to ascertain the nature of such a background variable.

8. Degree of awareness about community residents who are handicapped was not differentially related to attitude change in elementary or senior high school groups.

Integration of Handicapped Students

9. Senior high school students' attitude changes remained consistently unaffected by degree of integration.

10. Junior high students' attitude shifts were unaffected by integration in the Handicapped Person program but were influenced in the TV-Teacher group. In the latter, only students in what was perceived (by the students) as unintegrated schools experienced a positive change in attitude toward the handicapped. Replication is required to ascertain if this result would be consistently observed.

11. In constrast to the junior high school groups, elementary students who were definite in identifying their schools as integrated had a positive attitude change. Those students in grade 6 who felt their school was not integrated showed no significant change. The latter finding is also at odds with those from junior high school.

Differences between elementary and junior high schools with respect to integration and its effects on attitude change require more study to provide a basis for explanations. Perhaps elementary students have a greater predisposition to learn tolerance and empathy for the handicapped if concrete examples of handicapping conditions are nearby. In contrast, concrete examples may be inhibiting to young teenagers who prefer to deal with the phenomenon in the abstract.

Those interested in the effects of school integration of the handicapped in facilitating changes in perceptions of the majority group may wish to explore the following: 1) why the impact is somewhat mixed in elementary schools but favours integration, 2) the mixed results in junior high school which tend to favour segregation, and 3) the no-difference findings in senior high school. The pre-intervention averages (as reported in answer to Question 3) indicated no overall relationship between entry-level attitudes and degree of integration in the school. However, as noted above, differences in attitude shifts occurred when programs were implemented, i.e., interactions between program and degree of school integration were observed.

Acquaintanceship With a Handicapped Person (Table 11)

12. Knowing a handicapped person very well apparently is an inhibiting influence in changing general attitude at the secondary level. However, junior and senior high school students who know a handicapped individual fairly well are amenable to attitudinal change as are senior students who have nil acquaintanceship.

Once again, the sensitivities of the junior high age group are apparent. If they have arms-length familiarity with a handicapped person they are predisposed to change. However, if they have no acquaintanceship or are very well acquainted their general attitude is set and less amenable to change. Elementary and senior high school age groups demonstrated for greater flexibility in this regard.

QUESTION 4: WILL THE MODIFIED ATTITUDE LEVELS BE RETAINED OVER A PERIOD OF TIME?

The ultimate goal for all interventions by schools is to have students retain what they have learned. If a desirable insight or perspective is developed the intention is to avoid temporary, transitory retention and to accomplish permanency. To measure the degree to which altered attitudes in this investigation were retained a second test administration procedure was used. A month or six weeks after the first testing a second assessment was made of attitude levels in the program

groups. Differences between the two test results in average scores on the ATDP would represent retention/gain/loss effects.

Overall retention for combined program groups (Handicapped Person plus TV-Teacher) is displayed in Table 12. No significant difference occurred in average scores between assessments occurring a month or more apart. Hence, general retention was good since the attitude levels immediately following program presentations were maintained over time. Differences between variabilities in spreads of scores (standard deviations) were also not significant. Thus the patterns of responses remained the same over time.

Table 12

Retention of Average Attitude Toward Disabled Persons (ATDP) Total Scale Scores for Combined Program Groups

Time of Scale Administration	N	Average (Mean Score)	Standard Deviation
Immediately Following Program Presentation	762	4.27	0.543
A Month or More Later	1,439	4.23	0.545
Differences		.04	-0.002

Note: Differences are not significant.

Retention by program was examined by using data displayed in Table 13. The difference (retention) scores are 0.01 and -0.10 (loss) for the Handicapped Person presentation and TV-Teacher presentation groups respectively. Students enrolled in the live presentation by a handicapped person maintained their general attitude level. However, those participating in the TV-Teacher program experienced a slight, but statistically significant decline (however, the reader is reminded that the TV-Teacher group experienced a greater gain as measured immediately following the presentation. Accordingly, because of the decline in retention, its longer-term gain equalled that of the other program group, cf. table 8).

Table 13

Retention of Average Attitude Toward Disabled Persons (ATDP) Total Scale Scores for Each Program Group

Time of Test Administration	Program Group: Handicapped Person N	$\bar{X}$	SD	Program Group: TV and Teacher N	$\bar{X}$	SD
Four-Six Weeks After Presentation	862	4.23	0.54	544	4.24	0.53
Immediately After Presentation	423	4.22	0.52	325	4.34	0.56
Difference (Retention)		0.01			-0.10**	

** $p < .01$

Retentions by grade and by sex within-grade for each program are displayed on Table 14. None of the average change (retention) scores are statistically significant. For the TV-Teacher program there is a consistent decline in general attitude for all groups. However, the losses are too small to be significant. Accordingly, all grades and sex-within-grade groups maintained the altered attitudes they held toward handicapped persons.

Retention for each item on the ATDP Scale is reported in the fourth column (posttest 2 minus posttest 1) in Table 4. Surprisingly, none of the specific attitudes as represented by the ratings for each of the thirty ATDP statements, declined significantly over the 4-6 weeks between posttest 1 and posttest 2.

General conclusions regarding retention of attitudes toward the handicapped are as follows:

1. Overall, when the total all-grade student group average ratings were considered, the Handicapped Person presentation group maintained its attitude level. The TV-Teacher group experienced a very small but statistically significant decline.

2. However, the decline for the latter group was general and could not be attributed to any sub-group according to grade or sex-within-grade.

3. There were no significant gains or losses over time with regard to specific attitudes as measured by each of the thirty ATDP statements.

Table 14

Retention of Attitude Toward Disabled Persons by Sex and Type of Program Within Grades: Average Change (Retention) Scores

Program Presentation By	Time of Test Administration	Statistics	Grade 6			Grade 8			Grade 11		
			Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Handicapped Person	4 to 6 Weeks After Presentation	N	173	163	336	113	140	253	124	142	267
		$\bar{X}$	4.08	4.24	4.15	4.14	4.29	4.22	4.27	4.42	4.35
		SD	.53	.58	.56	.58	.54	.56	.48	.55	.52
	Immediately Following Presentation	N	75	68	143	65	70	135	59	83	142
		$\bar{X}$	4.16	4.22	4.17	4.22	4.20	4.21	4.22	4.35	4.30
		SD	.50	.57	.50	-.52	.44	.47	.62	.55	.58
	Average Change (Retention)		-.08	.02	-.02	-.08	.09	.01	.05	.07	.05
TV and Teacher	4 to 6 Weeks After Presentation	N	91	106	197	75	81	156	79	103	182
		$\bar{X}$	4.19	4.26	4.23	4.14	4.32	4.22	4.20	4.36	4.30
		SD	.45	.57	.52	.63	.57	.60	.40	.52	.48
	Immediately Following Presentation	N	37	48	85	67	57	124	51	64	115
		$\bar{X}$	4.37	4.31	4.34	4.21	4.37	4.28	4.27	4.53	4.42
		SD	.59	.51	.55	.59	.52	.56	.49	.59	.56
	Average Change (Retention)		-.18	-.05	-.11	-.07	-.05	-.06	-.07	-.17	-.12

In general, maintenance of general and specific attitudes was surprisingly good. The data do not permit conclusions concerning long-term (e.g., a year or longer) effects.

This completes the results report section pertaining to the effects of the programs on students' attitude toward handicapped persons. The next sections provide observations about processes, i.e., students', teachers' attitudes and opinions about program implementations.

QUESTION 5: WHAT WERE THE ATTITUDES OF STUDENTS TOWARD THE PROGRAM PRESENTED TO THEM IN TERMS OF OVERALL EVALUATION, USEFULNESS AND DIFFICULTY LEVELS?

Question 5 addresses a concern about the reception by student participants in each of the two programs. For each presentation, the views of students were collected with respect to how they felt generally about it (Evaluation), how useful they found it to be (Usefulness) and how easy it was to understand (Difficulty).

The instrument chosen to measure these three dimensions of attitude was the School Subjects Attitude Scales developed and validated by Clarke and Nyberg (1979).[1] The Scales use the semantic differential approach to measure attitudes toward school subjects. The factor analytic procedures used during development indicated that the polar-opposite adjective pairs comprising the instrument loaded on three interpretable factors; Evaluation (the general feeling about the subject); Usefulness (the utility) students ascribed to it; and Difficulty (how easy it was to understand).

General Feelings About Program Procedures

Table 15 reports the results of general attitude students expressed about the particular presentation in which each group participated. Averages and differences between programs are tabulated according to overall total, grade and by sex within grade.

Overall, the difference in mean scores for students participating in the Handicapped Person program was nearly 0.2 higher than for those involved with the TV-Teacher lesson. Students were more positive in general feelings when a handicapped person guided the discussion.

However, this overall difference can be attributed mainly to the more positive responses from students in grade 8. Only the junior high school group consistently favored the handicapped person presentation when the differences were considered according to boys, girls or grade. Table 15 indicates that none of the differences for the grade 6 cate-

[1] S. C. T. Clarke and V. R. Nyberg, School subjects attitude scales: Technical Report, Edmonton: Planning and Research Branch of Alberta Education, 1979.

Table 15

Student Attitudes Toward Program Presentations: Average Scores on the Program Attitude Scales (General Attitude) According to Program, Grade, Sex and Total

Program Presentation By	Descriptive Statistics#	Grade 6			Grade 8			Grade 11			Total
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
1) Handicapped Person	N	76	67	143	68	70	139	72	78	151	437
	$\overline{X}$	4.5	4.6	4.5	4.4	4.5	4.4	4.3	4.6	4.5	4.5
	SD	.62	.63	.63	.63	.58	.62	.65	.55	.61	.62
2) TV and Teacher	N	51	51	102	66	49	115	67	66	133	354
	$\overline{X}$	4.4	4.5	4.5	4.1	4.2	4.1	4.1	4.5	4.3	4.3
	SD	.63	.54	.59	.66	.55	.62	.78	.64	.73	.67
Differences Between Average Scores		.0522	.0622	.0543	.31**	.29**	.3069***	.228	.122	.185*	0.1946***

* $p < .05$
** $p < .01$
*** $p < .001$

# NOTE: $\overline{X}$ = mean or average of the responses on the 8 items of the Program Evaluation Scales (Semantic Differential) which measure students' perceptions of General Attitude Toward the Program Presentation.
SD = standard deviation: an index representing the spread or variability of the responses.
N = number of students responding to the Program Evaluation Scales.

gories were statistically significant and this also held for differences for boys and girls in grade 11.

Tables 16(a) and 16(b) display differences among average scores according to grade. Grade 8 students were significantly less positive than their counterparts in grade 6 with respect to the TV-Teacher program. However, they were as positive as their colleagues in grades 6 and 11 when asked to respond about the Handicapped Person program. This discrepancy may be due in part to the jaundiced view that junior high school students sometimes hold toward their own teacher. There were no significant differences in general feeling about program presentations among students grouped according to their contacts or acquaintanceship with handicapped persons.

Table 16(a)

Handicapped Person Presentation: Comparisons of Average Scores on the Program Attitude Scales (General Attitude) by Grade

N	$\bar{X}$	Grade	Difference Between Means 8	11
143	4.5035	6	.0575 (8 vs. 6)	.0399 (11 vs. 6)
139	4.4460	8		.0176 (11 vs. 8)
151	4.4636	11		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 16(b)

TV-Teacher Presentation: Comparisons of Average Scores on the Program Attitude Scales (General Attitude) by Grade

N	$\bar{X}$	Grade	Difference Between Means 8	11
102	4.4510	6	.3119*** (8 vs. 6)	.1728 (11 vs. 6)
115	4.1391	8		.1391 (11 vs. 8)
133	4.2782	11		

* $p < .05$
** $p < .01$
*** $p < .001$

Usefulness Ascribed to Program Presentation

The Usefulness subtest averages from the administration of the Attitude Toward School Subjects Scales were used to ascertain the degree of usefulness students identified with each program. The differences between programs in students' perceptions about utility are portrayed in Table 17.

Overall, the total-student group identified the Handicapped Person presentation as more useful than the TV and Teacher approach. However, few of the differences between programs by sub-group were significant since only the total grade 8 and the grade 6 boys' groups rated the Handicapped Person presentation more useful.

Students' Perceptions About the Difficulty of Presentations

The Difficulty subtest of the Attitude Toward School Subjects Scales was used to compare the extent to which students found the respective programs hard to follow and understand. Table 18 records the differences in this aspect of the program presentations according to ratings by the total student group, by grade and by sex for each grade.

Overall, students were most positive about the difficulty level of the class discussions led by the handicapped presenter. However, most of the favorable ratings with respect to difficulty can be attributed to boys and girls in grade 6 and 8. Senior high school students found each program approach equally easy to understand.

Specific Attitudes Concerning Presentations

Table 19 displays the differences in means (average ratings) for each polar-opposite adjective pair used in the Attitude Toward School Subject Scales. The differences between Program 1 (Handicapped Person) and Program 2 (TV-Regular Teacher) reflect the overall average ratings of the total (grades 6, 8, 11 combined) student group.

All aspects of general feeling about the program presentations favour the Handicapped Person approach. However, average ratings for five of the eight scales subsumed within the Usefulness dimension did not differentiate between programs. These were important-unimportant, unnecessary-necessary, impractical-practical, harmful-advantageous and meaningful-meaningless. Both program implementations were perceived to be equally important, necessary, practical, advantageous and meaningful.

Only two specific ratings on the Difficulty scales failed to favour the approach using a handicapped person.

Table 19 indicates no significant difference between means for the scales bounded by "elementary-advanced" and "strange-familiar." The six specific attributes accorded to the Handicapped Person presentation were that it was easier, lighter, clearer, simpler, more understandable and less demanding.

Table 17

Students' Attitude Toward Program Presentations: Average Scores on the Program Attitude Scales (Usefulness) According to Program, Grade, and Sex

Program Presentation By	Descriptive Statistics#	Grade 6			Grade 8			Grade 11			Total
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
1) Handicapped Person	N	75	67	142	70	69	140	71	78	150	436
	$\bar{X}$	4.7	4.6	4.6	4.5	4.7	4.6	4.5	4.8	4.7	4.7
	SD	.54	.57	.56	.63	.54	.61	.58	.37	.51	.56
2) TV and Teacher	N	51	50	101	66	49	115	67	65	132	352
	$\bar{X}$	4.4	4.7	4.5	4.3	4.6	4.4	4.4	4.8	4.6	4.5
	SD	.70	.65	.69	.72	.61	.69	.69	.47	.63	.68
Differences Between Average Scores		.28*	.05	.12	.18	.17	.18*	.10	.07	.10	0.144**

** $p < .01$

NOTE: $\bar{X}$ = mean or average of the responses on the 8 items of the Program Evaluation Scales (Semantic Differential) which measure students' perceptions of General Attitude Toward the Program Presentation.

SD = standard deviation: an index representing the spread or variability of the responses.

N = number of students responding to the Program Evaluation Scales.

Table 18

Students' Attitudes Toward Program Presentations: Average Scores on the Program Attitude Scales (Difficulty) According to Program, Grade, and Sex

Program Presentation By	Descriptive Statistics#	Grade 6			Grade 8			Grade 11			Total
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
1) Handicapped Person	N	76	66	142	71	69	140	72	76	149	435
	$\bar{X}$	3.9	3.9	3.9	3.7	3.9	3.8	3.6	4.0	3.8	3.8
	SD	.74	.63	.69	.71	.70	.71	.60	.58	.62	.68
2) TV and Teacher	N	50	51	101	63	49	112	65	63	128	345
	$\bar{X}$	3.7	3.6	3.6	3.4	3.6	3.5	3.7	3.7	3.7	3.6
	SD	.59	.72	.66	.64	.61	.63	.64	.66	.65	.65
Differences Between Average Scores		.23*	.33*	.28**	.28*	.32**	.31***	.09	.25	.09	.23***

* $p < .05$
** $p < .01$
*** $p < .001$

# NOTE: $\bar{X}$ = mean or average of the responses on the 8 items of the Program Evaluation Scales (Semantic Differential) which measure students' perceptions of difficulty of the program presentation.
SD = standard deviation: an index representing the spread or variability of the responses.
N = number of students responding to the Program Evaluation Scales.

Table 19

Comparison of Average (Mean) Scores by Item on the Students' Attitude Toward School Subject Scales (Semantic Differential - Form 2)

	Program#	N	$\bar{X}$	S.D.	Difference in Means	t Ratio
General Attitude						
Nice-Awful	1	440	1.48	.745		
	2	355	1.65	.891	.1638	2.77**
Boring-Interesting	1	440	4.68	.714	.1534	2.88**
	2	355	4.52	.771		
Unpleasant-Pleasant	1	440	4.10	.959	.3051	4.23***
	2	355	3.80	1.048		
Dislike-Like	1	440	4.51	.798	.1829	3.09**
	2	355	4.32	.853		
Bright-Dull	1	438	1.69	.838		
	2	354	1.85	.862	.1590	2.61*
Dead-Alive	1	438	4.51	.746	.2246	3.81***
	2	355	4.28	.883		
Lively-Listless	1	439	1.66	.876		
	2	355	1.85	.955	.1878	2.86**
Exciting-Tiresome	1	439	1.91	.880		
	2	355	2.18	.960	.2737	4.11***
Usefulness						
Useless-Useful	1	440	4.66	.696	.2056	3.55***
	2	355	4.45	.896		
Important-Unimportant	1	440	1.30	.750		
	2	355	1.38	.869	.0730	1.25

Table 19 (Continued)

	Program*	N	$\bar{X}$	S.D.	Difference in Means	t Ratio
Usefulness (Continued)						
Impractical-Practical	1	438	4.42	.793	.0933	1.51
	2	353	4.33	.917		
Worthless-Valuable	1	440	4.56	.665	.1140	2.22*
	2	355	4.45	.758		
Helpful-Unhelpful	1	440	1.40	.732		
	2	355	1.60	.923	.2817	3.35***
Unnecessary-Necessary	1	440	4.45	.794	.0647	1.12
	2	354	4.39	.814		
Harmful-Advantageous	1	439	4.40	.834	.0568	0.93
	2	355	4.33	.871		
Meaningful-Meaningless	1	439	1.40	.775		
	2	355	1.48	.789	.0803	1.52
Difficulty						
Hard-Easy	1	440	3.90	1.617	.3642	3.78***
	2	355	3.53	1.091		
Light-Heavy	1	440	2.26	1.306		
	2	354	2.73	1.322	.4702	5.01**
Clear-Confusing	1	440	1.60	.992		
	2	355	1.81	1.056	.2130	2.90**
Complicated-Simple	1	440	4.02	1.105	.3281	3.98***
	2	355	3.69	1.195		
Elementary-Advanced	1	440	3.14	1.308		
	2	352	3.16	1.251	.0182	0.20

Table 19 (Continued)

	Program*	N	$\bar{X}$	S.D.	Difference in Means	t Ratio
Difficulty (Continued)						
Strange-Familiar	1	440	3.52	1.215	.0326	0.391
	2	355	3.49	1.128		
Understandable-Puzzling	1	440	1.61	1.002		
	2	354	1.77	1.089	.1598	2.12*
Undemanding-Rigorous	1	435	2.67	1.168		
	2	349	2.84	1.084	.1728	2.14*

* $p < .05$
** $p < .01$
*** $p < .001$

Program 1 = Presentation by a Handicapped Person
Program 2 = Presentation by T.V. and Teacher

Attitudes Toward the Presentations: General Summary and Conclusions

Table 20 provides summary information about overall ratings by students on the General Evaluation, Usefulness and Difficulty subtests of the Attitude Toward School Subject Scales. All average ratings favor the experience students had with the presentations and discussions guided by the handicapped person. This approach was thought by students to be more enjoyable (by junior high school students) and somewhat more useful and less difficult by all groups.

The novelty of having a "new face" present information and guide discussions may well account for those differences which favour the handicapped individual's involvement. One implication is that junior high school students might be assigned priority for presentations which use this approach.

Table 20

Comparisons Between Programs in the All-Student Group's Attitudes Toward Program Presentations: Evaluation, Usefulness and Difficulty

Subtest	Program Presentation By	Descriptive Statistics N	$\bar{X}$	SD
Evaluation	Handicapped Person	437	4.47	.615
	TV and Teacher	354	4.28	.667
	Difference		0.19***	
Usefulness	Handicapped Person	436	4.66	.559
	TV and Teacher	352	4.51	.675
	Difference		0.15***	
Difficulty	Handicapped Person	435	3.83	.679
	TV and Teacher	345	3.61	.648
	Difference		0.22***	

*** $p < .001$

QUESTION 6: WHAT WERE THE OPINIONS OF STUDENTS AND TEACHERS ABOUT THE PARTICULAR PRESENTATION MODE THEY EXPERIENCED?

Students and teachers who participated in each of the two types of presentations were asked to rate, on a 4-point agreement scale, statements concerning aspects of the procedures used during implementation. The instrument used was the 12-item Program Evaluation Opinionnaire developed for this purpose. The average ratings by these observer-participants provided information about perceptions of strengths and weaknesses. In addition, open-ended comments were solicited.

Students' Opinions About Modes of Presentation

Table 21 displays the average scores for each program group and the difference between total average scores on the Opinionnaire. The overall results indicate a significantly more positive rating for the Handicapped Person presentation compared to the TV-Teacher experience (averages of 3.14 and 3.00 respectively and a difference of 0.14).

However, the comparisons of the differences in Table 21 by grade indicate that the significant overall difference is due entirely to the grade 11 group responses. For this senior grade the difference between the groups on the total opinionnaire (0.24, $p < .001$) indicated a more favorable set of opinions to the handicapped person presentation. Grade 8 students were generally less favorable than their counterparts in grade 6 and 11 about the presentation by a disabled person.

The responses of these groups for each statement on the opinionnaire are reported on Table 22. The average rating for each statement is recorded graphically for each group. In addition, the absolute differences between average response ratings are tabulated.

Results from the administration of the Student Program Evaluation Opinionnaire (SPEO) showed the students who saw or heard Program 1, the Presentation by a Handicapped Person had a more favorable opinion about that program presentation than did the students who heard and viewed Program 2, the TV and Teacher Presentation.

On the twelve item SPEO scale, 11 out of 12 items had statistically higher mean scores by Program 1 students than the mean scores of students rating Program 2. For eleven SPEO statements Program 1 students score Program 1 more favorably than did the students of Program 2 score Program 2. The single exception was the statement as to whether more outside reading was necessary for greater program impact.

Student attitudes were generally neutral regarding:

1. the issue of student participation rates during Program presentations (Table 22, item 11);

2. the necessity of outside reading prior to presentation (item 12); and

3. the question of adequate time to present the content of the presentations (item 14).

Student opinions about both program presentations were generally favorable for 9 out of 12 items measured on the scale.

Both programs:

1. increased students' general knowledge of disabled persons (item 3);

2. were worthwhile (item 4);

Table 21

Students' Program Evaluation Opinionnaire Results: Averages and Differences Overall and By Grade According to Program

Program	Grade 6			Grade 8			Grade 11			Overall		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
Handicapped Person	152	3.14	.353	136	3.06	.317	157	3.20	.415	447	3.14	.371
TV and Teacher	93	3.05	.372	125	3.00	.284	102	2.94	.275	321	3.00	.311
Difference		0.09			0.06			0.24***			0.14***	

*** $p < .001$

Table 22

Profile of Students' Attitude Toward Programs Seen and Heard: by Mean Responses on Form 3, Students' Program Evaluation Opinionnaire (SPEO)

Students' Program Evaluation Opinionnaire (Program 1 - Handicapped Person) (Program 2 - TV-Teacher)	Statistical Significance of Mean Differences Program 1 vs. Program 2	Average Rating Scale Response: Strongly Disagree 1 — Disagree 2 — Agree 3 — Strongly Agree 4
3) The program increased my general knowledge about handicapped (disabled) people.	.23***	2 1
4) It was a very worthwhile program.	.14***	2 1
5) More school subjects should be taught this way.	.18**	21
6) I would prefer a different method of instruction.	.30***	1 2
7) The pictures and discussion used in the program were easy to follow.	.10*	21
8) Some things were not explained very well.	.29***	1 2
9) The program held my attention.	.11*	21
10) Generally, the material and information presented were well organized.	.18***	21

Table 22 (Continued)

Students' Program Evaluation Opinionnaire (Program 1 - Handicapped Person) (Program 2 - TV-Teacher)	Statistical Significance of Mean Differences Program 1 vs. Program 2	Average Rating Scale Response: Strongly Disagree (1) – Disagree (2) – Agree (3) – Strongly Agree (4)
11) There was not enough student participation for this type of program.	.14*	12
12) More outside reading is necessary.	N.S.	12
13) The pace of the program was too slow.	.12*	12
14) There was not enough time to cover the subject thoroughly.	.15*	1 2

* $p < .05$
** $p < .01$
*** $p < .001$

3. showed that more school subjects should be taught this way (item 5);

4. had a suitable method of instruction (item 6);

5. were easy to follow through discussion and pictures (item 9);

6. held their attention (item 7);

7. were well organized (item 8);

8. had suitable pacing (item 13).

However, in each of the areas noted above, Program 1, the Presentation by a Handicapped Person had a significantly higher mean score than Program 2.

Conclusions based on student observations are that both programs were generally viewed favorably. Improvements which are implied from the data could include: 1) lengthening the presentations (perhaps to several class periods), 2) providing some relevant reading material, and 3) promoting increased discussion by students by providing outside reading or some other means.

Teachers' Opinions About Modes of Presentation

In order to evaluate the program presentations from the perspective of viewers and implementors all teachers and samples of students recorded self-perceptions on the Program Evaluation Opinionnaire. This section reports the results as recorded by teachers who were involved in either the Handicapped Person presentation or the TV and Teacher program.

Table 23 displays the average scores and the difference between scores on the teachers' opinionnaire. The difference between means was greater than 0.4 on the 4-point scale ranging from strongly disagree to strongly agree. This is a notable difference indicating a more positve overall rating for the Handicapped Person presentation.

Table 23

Teachers' Program Evaluation Opinionnaire Results:
Averages and Differences According to Program

Program	N	Average ($\bar{X}$)	Standard Deviation
Handicapped Person	42	3.88	0.328
TV and Teacher	30	3.47	0.507
Difference		0.41***	

*** $p < .001$

The mean score for the Handicapped Person program (3.88) was very near the upper limit of 4.0 on the 4-point rating scale used. This indicates that many of the teachers rated nearly all statements on the opinionnaire as "4" or "Strongly Agree." Accordingly, they were generally very positive about the worth, clarity, pacing and other aspects of the lesson presented by a handicapped person.

Teachers were still quite positive (3.47 on the 4-point rating scale) about the teacher presentation based on the kit of materials and discussion guide provided. Greater consensus among teachers than among students was noted (i.e., standard deviations were smaller). Five opinionnaire items did not differentiate between the perceptions held by teachers towards the two programs seen and heard (Table 24). No significant differences in average ratings were recorded between programs viewed with respect to the following opinionnaire statements:

5) More school subjects should be taught this way.
7) The pictures and discussion used in the program were easy to follow.
12) More outside reading is necessary.
13) The pace of the program was too slow.
14) There was not enough time to cover the subject thoroughly.

Seven out of twelve items on the opinionnaire differentiated between the two teacher groups. All significant differences in mean ratings recorded on Table 24 favoured the handicapped person presentation. The statements about program implementation which prompted higher ratings for the disabled individuals' approach referred to the following:

3) General knowledge gain about handicapped.
4) Worthwhileness of the program.
6) Preference for another instructional method.
8) Clarity.
9) Attention retention.
10) Organization.
11) Student participation.

Both teacher groups assigned neutral average ratings to statements about:

12) The necessity for outside reading.
14) Adequacy of time to cover the subject thoroughly.

Conclusions concerning teacher reaction to presentation mode were that they generally rated the handicapped individual's approach more positively than the procedure involving the audio-visual kit and teacher. The teacher groups did not differentiate between programs heard and viewed with respect to: 1) transferring the procedure to other subjects (both "agreed"), 2) ease of following the presentation (both programs were rated very easy), 3) necessity for outside reading (neutral), 4) pacing (disagreed it was too slow), and 5) the necessity for outside reading by students (both groups neutral).

In general, both approaches were rated quite positively by teachers involved. Either approach would be acceptable to them. All open-ended comments indicated support.

Table 24

Profile of Teachers' Attitude Toward Programs Seen and Heard or Delivered:
by Mean Responses on Form 4, Teachers' Program Evaluation Opinionnaire

Teachers' Program Evaluation Opinionnaire (Program 1 - Handicapped Person) (N = 51) (Program 2 - TV-Teacher) (N = 35)	Statistical Significance of Mean Differences Program 1 vs. Program 2	Average Rating Scale Response: Strongly Disagree 1 — Disagree 2 — Agree 3 — Strongly Agree 4
3) The program increased my general knowledge about handicapped (disabled) people.	.50***	2 1
4) It was a very worthwhile program.	.27**	2 1
5) More school subjects should be taught this way.	N.S.	1 2
6) I would prefer a different method of instruction.	.32**	1 2
7) The pictures and discussion used in the program were easy to follow.	N.S.	2 1
8) Some things were not explained very well.	.30**	1 2
9) The program held my attention.	.27**	2 1
10) Generally, the material and information presented were well organized.	.48***	2 1

Table 24 (Continued)

Teachers' Program Evaluation Opinionnaire (Program 1 - Handicapped Person) (N = 51) (Program 2 - TV-Teacher) (N = 35)	Statistical Significance of Mean Differences Program 1 vs. Program II	Average Rating Scale Response: Strongly Disagree 1 — Disagree 2 — Agree 3 — Strongly Agree 4
11) There was not enough student participation for this type of program.	.35**	1 2
12) More outside reading is necessary.	N.S.	12
13) The pace of the program was too slow.	N.S.	12
14) There was not enough time to cover the subject thoroughly.	N.S.	12

* $p < .05$
** $p < .01$
*** $p < .001$

RECOMMENDATIONS

It is recommended:

That Alberta Education make available to schools through its School Book Branch the audio-visual kit and discussion guidelines prepared by Mr. Lee Bussard.

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A P P E N D I C E S

APPENDIX A

Literature Review: A Compendium of Research Findings Related to Attitudes Toward the Handicapped

APPENDIX A

LITERATURE REVIEW: A COMPENDIUM OF RESEARCH FINDINGS RELATED TO ATTITUDES TOWARD THE HANDICAPPED

Defining the Disabled

The definition of what constitutes a handicap or a disability in contrast to a difference is a major problem in theoretical and practical terms for those who wish to foster positive attitudes. The Health and Welfare Canada report, Disabled Persons in Canada (June 1980) provides the following definitions of a handicapped or disabled person:

> Section 504 of the U.S. Rehabilitation Act (1973) defines a handicapped person as a person with a mental or physical impairment which substantially limits one or more of his major life activities (p. 3).
>
> The United Nations Declaration on the Rights of Disabled Persons (1975) defines a disabled person as any person unable to ensure by himself or herself wholly or partly the necessities of a normal individual and/or social life, as a result of a deficiency, either congenital or not, in his or her physical or mental capabilities (p. 3).

Most definitions are operational and are developed for particular administrative purposes. They usually include a reference to limitation of functions and/or to activity retriction such as ambulatory disabilities, sensory loss of hearing or sight, communication and coordinational disabilities or disabilities (infirmities) associated with aging. Steer (1979) and Kutner (1971) attempted to define the nature of a disability. Steer (1979) is of the view that a handicap is a relative term and may be the result of:

1. A deficiency within a person.
2. A situational inadequacy.
3. An interactional difference.

Attempts have also been made to classify impairment, disability and handicap in an effort to reconcile these concepts. Handicaps are not characteristics of individuals but are socially defined. Thus, a handicap represents the social and environmental consequence to the individual stemming from the presence of an impairment or disability. There are persons without organic defect or impairment who cannot function because of disordered thought or a feeling in low self-esteem. On the other hand there are individuals with severe or multiple impairments arising from a variety of conditions, who exhibit remarkable stamina and who are high level performers (Health and Welfare Canada, 1980, p. 4).

Handicapped persons, then, represent a composite picture involving various degrees of functional limitation and/or activity restriction

regardless of the origin or underlying major condition. They generally believe that they are "people first" and do not wish to be exempted from the normal social, economic and cultural roles of other citizens.

Today, there is a strong tendency to favour the use of the term handicapped rather than disabled. For purposes of this study, the terms handicapped and disabled are used interchangeably.

Current Public Policy in Canada Toward the Disabled

The aim of the 1981 International Year of Disabled Persons is to encourage the rehabilitation of persons who have some form of physical or mental impairment. The policy goals of Canada toward the rehabilitation and integration of disabled persons into Canadian Society has been outlined in the June 1980 publication of Health and Welfare Canada entitled "Disabled Persons in Canada." The central Canadian goal is to take an honest look at the status of disabled persons in Canada and to undertake an action plan to promote full participation of the disabled in all facets of Canadian Society. The intention is to shift the norm of isolation, division, charity and neglect of handicapped persons toward heightened awareness of and acceptance of disabled persons into the mainstream of community life.

In the words of Monique Begin, Minister of National Health and Welfare,

> It is appropriate as we enter the 1980's, with renewed interest in the "consumer society," that we seek every means at our disposal to enable disabled persons to enter the mainstream of the community in housing, education, employment, travel and leisure, so that they may enjoy the productive lifestyle taken for granted by most Canadians. (Health and Welfare Canada, June 1980, preface, i).

Access to Employment

Health and Welfare Canada (1980, p. 8) reports that employability of persons is generally dependent on three factors: the availability of jobs, the availability of persons and the possession of skills and competence to meet the job requirements. In the case of handicapped persons, additional factors may be present such as:

1. stereotyped or prejudiced expectations which may affect hiring;

2. the lack of necessary education, training or experience which may act as a barrier to competition or performance; and

3. special aids in mobility, transportation, access to buildings and other aids which may be necessary to help in making adjustments to the work environment.

There is considerable evidence and concern that in Canada, as elsewhere, disabled persons are unemployed or under-employed at a rate far in excess of the normal adult population. This occurs despite an improved range of services, advances in human rights, stated policies and efforts of committed action groups. More coordinated efforts and positive action programs are required to provide catching up opportunities for disabled persons who, as a group, have experienced systematic discrimination. (Health and Welfare Canada, 1980, p. 8-9).

Access to Health Care

Canada's health care insurance program has succeeded in bringing the benefits of modern medical knowledge, skills, technology and hospital care to all Canadians. In the past twelve years, great improvements have taken place in the training in health disciplines with a growth in the number of qualified persons, institutions and in the range of skills and disciplines in response to perceived needs for new levels of health care services. However, a much fuller integration and rational deployment of facilities and personnel, as well as the extension of the rehabilitation team approach to the reduction and control of the burden of long-term disabilities and disabling conditions must occur. Access to adequate health care for the disabled depends on improving theavailability and distribution of health care services and the effective deployment of the skills and knowledge of medical specialists, generalists and health care workers. (Health and Welfare Canada, 1981, pp. 9-10).

Access to Education

In 1976, Canada accepted the International Covenant on Economic, Social and Cultural Rights of the United Nations. Article 13 of that covenant provides that the states parties recognize the right of everyone to education and that primary education shall be compulsory and free to all. Canada is a country whose population enjoys one of the highest educational attainments in the world. However, disabled persons have not shared sufficiently in our educational attainments. Education is under provincial jurisdiction and we do not have in Canada a model bill which provinces could adopt or adapt to provide universal, free, appropriate, publicly-supported education for all children, regardless of their mental, physical or emotional disabilities or impairments. In half of our Canadian provinces, there still exists an exception from the right to attend school in the case of those who are deemed unable by reason of physical or mental handicap to profit from instruction. Permissive legislation which empowers, but does not make mandatory, the establishment of special education may further exclude or delay education for disabled children. In some provinces, school authorities subsidize privately-run classes for handicapped children (Health and Welfare Canada, 1980, p. 6).

Considerable progress is being made in the development of special education programs and in the integration in part or in whole of children into regular classrooms and schools. However, there are those who question whether it is really possible to integrate disabled children into

education and into society as citizens on an equal footing and to ensure happy lives for them. Mannschatz (1979) writing in the UNESCO publication entitled "The Child's Right to Education" reports that this question can be answered in the affirmative on the basis of practical experiences gathered in other countries of the world. He reports that in the German Democratic Republic, for example, blind, weak-sighted, deaf, hard-of-hearing and physically disabled children attain the educational level of the ten-class general polytechnical secondary school.

Perkins (1979) stressed the urgent need for a Canadian research and development focus on special education to develop necessary curriculum materials. Due to the nature of the definition of disability and the ratio of visibly disabled and mentally impaired to the partially and invisibly disabled and emotionally impaired, which could apply to under one fifth of the school population, Perkins makes the assumption that disabilities closest to normal can be managed in normal classroom settings. A result of problems defining and identifying disability has been a body of literature that ignores the criteria for appropriateness of compulsory regular attendance at regular schools for certain children and tends to assume that regular schools should be able to meet the major needs of the disabled in the school service area. Perkins (1979) proposes that regular classroom teachers and principals be given adequate "in-service" education and that this be part of their certification requirements so that they will gain knowledge, competence and motivation to implement mainstreaming where appropriate. Future innovations in special education must include parent, students and community groups so that the "correctly proclaimed attitudes" will be translated into everyday behavior (Health and Welfare, Canada, 1980, p. 6-8).

Mainstreaming the Handicapped

For many years, special education was an isolated, marginal category of education. Seriously handicapped children were placed in institutions with little or no educational programming or sent away to residential schools. Even those mildly handicapped children who attended public schools were separated from the rest of the pupil population. They had their own classrooms and their own teachers. Contacts between handicapped children and their "normal" peers were generally kept to a minimum. This separation often extended to the special education teacher as well.

During the last decade, a major movement began which aimed at integrating handicapped children in regular school programs. This movement is now commonly referred to as mainstreaming. The focus of mainstreaming was on providing alternatives for handicapped children to maximize their opportunities for getting the best education possible and leading as full a life as their capacities allowed.

Today, mainstreaming is increasingly becoming a reality in school systems throughout the country. However, mainstreaming in the schools is a piece of the broader movement toward normalizing the total lives of handicapped persons. Advocate groups in the United States have been using the courts to ensure public education for all children, no matter

how seriously impaired. Parents have become militant in demanding the rights to which they believe their children are entitled.

Many studies have been conducted on the topic of when, how and with whom to do mainstreaming, and on the effectiveness of mainstreaming. Yet, surprisingly, very little attention has been given to the question of how to develop receptivity in the mainstream toward the handicapped children who are or will shortly be entering it. In a review of literature on changing attitudes toward the handicapped, Cohen (1977) points out that little research exists which explores attitudes of school personnel toward handicapped children. She suggests that there may be several reasons why educators have not given sufficient attention to preparing students and teachers to gain a better understanding and appreciation of the handicapped. Educators feel that there is no time for special programs about handicapped persons since public pressure demands that the time for integration into the mainstream of school life is now. Many teachers believe that attitudes are complex, abstract entities and they prefer to deal with concrete instructional cognitions such as pupils' numerical skills or word analysis skills, rather than with their misconceptions or fears or their cruelties to the disabled. Cohen futher asserts that in-service training of teachers is necessary to effect attitude changes but such training is most effective if program presenters have first-hand contact with disabled persons or with a disability.

Mainstreaming, while well-intentioned and given much public support, is generally predicated on four basic assumptions. The most recent summary of findings related to the policy of mainstreaming the disabled into regular classrooms was done by Linton and Juul (1980). They report some disturbing findings relating to the four basic assumptions about mainstreaming handicapped children. These are as follows:

Assumption 1: The regular classroom setting is less isolating for the handicapped child.

The Findings:

a. Social acceptance increases moderately when the handicapped join a mainstream class.

b. The degree of acceptance is highly individual rather than that of the group.

c. As the degree of disability rises, the tendency for rejection by normal peers also rises. (Robinson and Robinson, 1976).

d. Adjusting to regular classrooms may place unrealistic demands on the retarded child. There are greater risks of damaging self confidence and it does not ameliorate isolation outside the schools.

Assumption 2: Disabled children benefit academically and socially from integration with regular students.

The Findings:

a. Competitive achievement is related to peer acceptance.

b. Individualized instruction may be sharply limited in a regular classroom.

c. Normal students with disabled peers in the classroom perform more poorly than peers in non-integrated classes (Abramson, 1980).

d. Social gains for the disabled are related to small class size and specialized teacher training.

Assumption 3: Regular students in mainstreamed classes will come to accept disabled students in a more positive normal manner.

The Findings:

a. Studies indicate that this is not generally true (Gottlieb and Davies (1973).

b. Greater degree of acceptance deals exclusively with mildly disabled persons.

c. Social acceptance is related to conformity and performance within the group.

Assumption 4: The teacher is the key.

The Findings:

a. The idea that a "good" teacher is quite capable of teaching both handicapped and normal students in a productive manner is not supported by studies on teacher attitudes (Shotel, Iano and McGettigan, 1972).

b. Regular teachers, in general, oppose integrating the handicapped into their classes.

c. When regular teachers with favourable attitudes toward mainstreaming actually experience mainstream teaching, their attitude reverses negatively (Shotel, Iano and McGettigan, 1972).

d. Research indicates a major difficulty with individualizing instruction exists in regular classrooms. The confounding issue is that the regular classroom has a two to six-year spread of student ability and achievement. The teacher is expected to manage this wide range of ability by individualizing the instructional process as much as possible. Generally, this results in teaching to a mean or modal level of the total group. It is unrealistic to expect the teacher to provide specialized resources for the mildly to moderately handicapped

child over and above their services to the regular range of students in a class (Linton and Juul, 1980, pp. 433-435).

Tindall (1975) outlines five major problems encountered when mainstreaming is globally implemented as policy across educational institutions.

1. There is a tendency to mainstream disabled persons into schools and training centres without additional classroom inputs of resources in terms of personnel and materials suited to the nature of the disability.

2. The diagnostic services per disability are limited and poorly researched and refined.

3. Major mainstreaming services are highest for the most visible disabilities which are not necessarily the most limiting. Most services are extended to those who vary obviously from the "normal" individual by appearance rather than by the nature of the handicap.

4. There is a weakness in teacher capability and training for dealing effectively with disabled children in regular classroom settings. Standard teaching techniques used with normal children are usually extended toward disabled children in the same class.

5. Job skills which the disabled could achieve are badly used because employers do not identify job tasks that match the disabled person's capability.

Mainstreaming needs to be viewed within the context of various complex factors requiring analysis and understanding of the difficulties involved in providing simple educational solutions. There may be any number of factors to be considered in each type of handicap and no two cases are exactly alike. For example, there are varying degrees of retardation, related physical handicaps, economic disadvantage, cumulative learning defects as well as emotional and social defects. These conditions seldom appear in isolation since a handicapped child usually manifests several problem areas in ways unique to his or her own developmental situation. In developing any kind of individual educational plan, it is also necessary to take into account the student's capacity for academic achievement, social maturity, peer relationships, family setting, capacity for self-management out of school and the availability of community support services (Linton and Juul, 1980, p. 435).

Attitudes, Reactions and Acceptance of Handicapped Persons

While there are many definitions of attitudes, most definitions include three aspects: an affective aspect--how a person feels about something or someone; a cognitive aspect--what a person believes about something or someone; and a behavioral aspect--how the persons will tend to act in relation to something or someone (Krech, Crutchfield and Balachey, 1962). It is this third aspect--the behavioral readiness or set, which is of primary concern when one thinks of preparing people for

acceptance of the handicapped. Behavioral sets are an outgrowth of the feelings and beliefs of the individual which are an integral part of action. By the age of five or six, most children have acquired many expectations, feelings, beliefs and behavioral tendencies toward people.

Cohen (1977) reports that these and other factors influence the formation of attitudes, particularly attitudes toward the handicapped. The factor which probably comes into play earliest is that of expectancy sets. When people first see an individual whose facial or body features are grossly distorted or missing, most of them feel a sense of discomfort or stress. This immediate reaction to people whose appearance differs markedly from that which one comes to expect may have its basis in the early development of the individual. In terms of attitudes, the young child builds up a set of expectations about people and then experiences anxiety in reaction to any marked deviations from them. Those expectations relate, not only to how people look, but also to how they act--i.e., their movements, manners and speech. Since young children often live in worlds which do not include the obviously physically or behaviorially disabled, their expectancy-sets may not include these deviations.

Maslow (1962) described two different styles of reacting to unknown situations or events during childhood. He observed that those children whose basic safety and security needs have been adequately met face new and novel situations as curious explorers while those children whose basic security needs have not been adequately met are generally fearful and defensive when faced with new situations. Maslow called the former children "growth oriented" and the latter "deficiency oriented." If the young child who is growth oriented experiences initial stress upon encountering a disabled person, it is likely that his initial response toward the disabled individual will be followed by a period of exploration, involving close scrutiny and much questioning about the disabled, designed to help him assimilate this new element in his experience.

The largest single influence on the attitudes of young children is parental values. Parents serve as models for their children through their words; they provide information about appropriate behavior, about rules, and about what will be rewarded or punished. Parental communications, for example, have been shown to be at the base of young children's rejection of members of racial minorities (Cohen, 1977). Cohen states that most people are not against the handicapped. They may feel discomfort and uneasiness in relation to disabled people, but these feelings will often be accompanied by compassion, guilt and attempts at helpful behavior when chance encounters with the disabled occur. What young children are likely to get from their parents' reaction to the handicapped is a mixed or ambivalent set of feelings, beliefs and behavioral tendencies. However, attitudes which grow out of mixed or ambivalent parental communications are likely to be open to influence, too.

There is a broader-based response that parents model for their children--the response to that which is different in any form. Response to difference to the disabled is a part of a larger picture. The young child is exposed to a multitude of parental reactions to that which is novel and unexpected. The child interacts with parents about such encounters. If parents themselves react to that which is different with

fear and withdrawal, the child will learn this response-set. A typical example of this is a child's fear of thunder and lightning which is a learned response-set derived from the parents' reactions to the situation.

Attitudes of adults differ from those of children in that they have become more formally integrated, thus creating a greater rigidity and resistance to change. On the other hand, young children's attitudes are rudimentary and incipient and have not yet been set into a firm, interlocking pattern. This makes them more accessible to influence. During the school years, feelings, beliefs and action tendencies will become increasingly differentiated and integrated.

The premise that most children, at the time they begin school, are still open to influence in terms of their attitudes toward the handicapped leads to consideration of the influences they may be exposed to in school. Unfortunately, some of these influences may reinforce rather than weaken tendencies toward negative attitudes. Teachers often reflect and convey the values dominant in society and, without awareness or intent,they can convey messages which may reflect negatively on the disabled.

Cohen (1977, p. 13) suggests that in the past, schools did little to broaden children's expectancy sets, to encourage the perception of similarity in terms of a wide range of characteristics or to stimulate appreciation of differences. Homogeneous classes, ability grouping within classes and rewards for doing better than one's peers, rather than mastering a task at one's own developmental level, are practices which tend to reinforce negative attitudes toward handicapped children who are often unable to fit into this organizational structure.

Administrators and teachers have stated various reasons for not being able to accommodate handicapped students in their schools. Common examples include the following: the orthopedically impaired child is kept out of school because he or she is unable to negotiate steps or stairs unassisted; schools lack adequate physical facilities such as ramps and washroom conveniences, which are required to accommodate the child in a wheel chair; large print reading materials and other resources are unavailable for use by the severely visually impaired child; deaf children who use sign language are unable to communicate with others in a regular classroom setting; well developed guidelines and programs designed to meet the special educational needs of children with different handicaps are usually not available to teachers; there is a shortage of teachers and/or aides who are trained to deal with handicapped children. Last, but not least, there is a lack of funds to provide the necessary resources.

Teachers, who are faced with the probability of having handicapped children in their classroom, have reacted negatively because they see a need for: more teachers' aides; smaller class sizes; well-developed special education programs for individualizing instruction; and reduced instruction time, to enable them to attend to the needs of handicapped children. They are also concerned that the quality of instruction offered to regular students may be adversely affected.

It is noteworthy that a recent news release from Alberta Education (July 28, 1981) announced that, starting in September, 1981, hundreds of Alberta's handicapped children will have a curriculum designed for their special educational needs. Four different programs of study have been developed. There is a curriculum for the visually impaired and three for children with different degrees of physical and mental handicaps; i.e., the educable mentally handicapped, the trainable mentally handicapped and the dependent handicapped. A curriculum for the hearing impaired is in the final stages of development.

Actions as well as words communicate attitudes and values and the school, by the nature of its organization and through the instructional process, conveys messages which may either reinforce or weaken attitudes. When handicapped children are kept in special classes in one area of the school apart from the mainstream and rarely participate in activities with other children, an attitude is being communicated to the non-handicapped children which suggests that handicapped children are different and belong apart from others.

Teacher behavior may reinforce negative attitudes. Some teachers show their resentment of the presence of handicapped children by ignoring them or by neglecting to provide extra help they need to participate in the work and activities of the class. Fortunately, there are many teachers who are very supportive and helpful. Teachers reinforce negative messages when they avoid contact with special classes or show discomfort in the presence of disabled persons. They reinforce negative messages when they make such comments as: "What's the matter with you? Can't you understand anything?," or "How can you make so many mistakes? Are you retarded?;" or "Are you deaf? I just told you that." Without being aware of it, teachers are stimulating negative associations by such comments.

Attitudes are in large part communicated through unthinking behavior. Teachers may also communicate to children their rejection or approval of the handicapped through the course content which they teach.

There are many research studies dealing with adult attitudes toward the handicapped but very few of them have specifically focussed on attitudes of school personnel. Overline (1977) conducted a study of attitudes of professional educators toward mainstreaming exceptional children into regular school classrooms. Four hundred and sixty-four educators were in the sample. They were tested on attitudes held and acceptance of handicapped in the mainstream. His findings indicated that educational personnel as a whole generally held positive attitudes toward the disabled. Principals held significantly more positive attitudes than special education teachers on four out of ten categories tested. These categories were those relating to the intelligence of the child, degree of vision, state of hearing and the acceptance of children with emotional problems as being disabled. Teachers with more teaching experience showed more positive attitudes and greater acceptance of handicapped children than less experienced teachers. Rural personnel had significantly more positive attitudes than those from urban or suburban areas.

Attitudes toward and acceptance of handicapped persons are also influenced by appearance and the seriousness or degree of disability. Winberg (1979) states that there is a hierarchy of handicaps and of public acceptance. In the pecking order of disabilities, the blind and the paraplegics are at the very top in terms of public awareness while cerebral palsy sufferers are at the bottom in terms of public acceptance. This is because in many cases, people with cerebral palsy do not present a pleasant picture. Their speech is laboured, movements are jerky and unpredictable and their walk is lurching and awkward. Women with cerebral palsy are particularly vulnerable to hurtful behavior because our society believes that, in order to be attractive, women must have faces and bodies that are pleasing to the eye.

In a review of research into the reaction and acceptance of handicapped by non-handicapped children, Richardson (1975) found that 85 per cent of several thousand children tested preferred the picture of a non-disabled to a disabled child. The inference in the study was that non-handicapped children prefer normalcy or events which fit usual expectations and they would accept first those disabilities closest to normal. The disability least acceptable from a choice of six pictures was obesity in girls. Another finding in this study was that girls showed greater acceptance of the handicapped than did boys.

Block and Yuker (1979) report that there are different attitudes toward different physical disabilities. The relatively non-visible disabilities such as heart disease or diabetes are difficult to perceive and result in minimal negative attitudes. The same is true for minor sensory disabilities and even loss of a limb. However, there is evidence of more negative attitudes toward persons who are totally blind or deaf or those who have lost more than one limb. The most rejected persons are those with the most non-normal appearance or behavior which may be hard to ignore. Thus facial disfigurement, brain damage involving strange speech patterns or strange gait are hard for people to adjust to or accept. Interestingly, obesity is one of the physical disability categories experiencing the most rejection. (Block and Yuker, 1979, p. 2).

While research on the attitudes of school personnel is somewhat limited, research on the attitudes of children toward their disabled peers is not. In general, results of studies on the attitudes of children toward their handicapped classmates indicate that handicapped children are less well accepted than are other children (Cohen, 1977, p. 15).

Bryan (1974) using a sociometric technique, found that learning disabled children in grades 3, 4 and 5 are not generally well accepted by their classmates. Similar reactions were obtained by Centers and Centers (1963) in reaction to an amputee child. Billings (1963), using projective techniques, found that elementary school children hold unfavourable attitudes toward their crippled peers. Gottlieb and Budoff (1972) found that educable mentally retarded children in ungraded elementary schools were rejected significantly more often than were other children. A study of educable retarded adolescents integrated into junior high school classes found that these students were less well accepted than their classmates on a sociometric scale (Monroe and Howe, 1971). This study

also found that acceptance did not increase with length of time since integration.

These results on the non-acceptance of handicapped children in the schools are supported by the findings of Richardson, Ronald and Kleck (1974) conducted in an integrated camp. Not only were the visibly and non-visibly disabled boys in camp less accepted than their normal peers, but the close contact between bunkmates did not diminish the negative effect of a visible impairment.

Recently some findings have been obtained which do not support the body of data pointing to rejection of the handicapped by their peers. These results appear to indicate that under selected conditions, handicapped children will be accepted by their peers. Kennedy and Bruininks (1974), for example, found that hearing impaired children integrated into regular first and second grade classes were not less favourably rated on sociometric indices than were their classmates; a finding which contradicts most earlier research data on the acceptance of hearing impaired children. Jones, Lavine and Shell (1972) found that, while some blind children integrated into regular classes in grades 4, 5 and 6 were rejected, others were quite popular. Associated reports and case studies from pre-school classes also support the finding that disabled children are accepted by their peers under selected conditions (Alexander, 1973).

The discrepancy between these latter results and the larger body of data may reflect differences in conditions and the kinds of support which accompany contact between handicapped children and non-handicapped children. There is a need for further research to determine what approaches are likely to foster more positive attitudes toward the handicapped on the part of school personnel and non-handicapped children and the kinds of supportive integrated settings which will promote a better understanding of disabilities and the people who have them.

Modifying Attitudes Through Intervention Programs

A review of the literature yielded a limited number of experimental studies in the area of modifying or changing attitudes toward handicapped persons and in identifying the most effective types of techniques or instructional programs in school which will effect attitude change. There are several ways suggested in the literature surveyed in which attitudes may be changed. Gellman (1959) suggests that a continuing educational program accentuating the following five ideas will foster positive attitude change toward the disabled:

1. acceptance of disability as a natural phenomenon which involves changes in customary living patterns;

2. recognition that the handicapped can function as school, work and recreational companions of the non-handicapped;

3. the use of positive job specifications which emphasize abilities;

4. the avoidance of negative job specifications which lead to rejection of the disabled;

5. recognition that each handicapped person can contribute to society regardless of the type and severity of his/her disability.

He further suggests that school and society can supplement this approach by stressing values which do not require each and every child to fit current concepts of normality. Equally important is the commingling of all children in school and play activities. With opportunity for normal relationships, handicapped and non-handicapped children can learn to know each other better as persons.

Tindall (1975) lists three requirements necessary to change attitudes toward the disabled: acceptance, commitment and action. He further maintains that, in schools, the most effective programs for effective attitude changes are those which are produced locally. However, he claims that local projects have limited acceptance because these are usually of short duration and have limited involvement. They are generally short term programs with little continuity or follow-up. Roeher (1961) is of the opinion that patronizing and manipulative programs and campaigns would have little impact on changing attitudes toward the disabled. Any change in attitude must come about naturally in order to be long-lasting because people whose behavior has been changed through psychological manipulation revert to their previous state of mind as soon as the agencies of manipulation are removed. Kutner (1971) advocates the potential of effectively changing attitudes through the use of experimental interventions in natural settings and in association with disabled persons. Winberg (1979) is of the opinion that close contact with handicapped persons has considerable impact on attitude change in that such interactions have the advantage of meeting the needs of the disabled for friendship and understanding.

Various other approaches have been advocated for modifying attitudes of students and others toward the handicapped including: in-service programs and conferences, group discussions about disabilities, panel discussions by disabled persons, role playing, disability simulation experiments, live presentations by a disabled person, mainstreaming or integrating handicapped into regular classrooms, audio-visual programs (T.V., video-tapes, films), and use of various curricular approaches which may be adapted to teaching about disabilities.

Miller and Briggs (1958) conducted a study designed to assess the effectiveness of undirected group discussion about racial groups on attitude change when discussion groups are sociometrically structured. Two types of groups were selected from 42 boys in two secondary school classes. One group (psyche-group) was considered high in cohesion while the second group (socio-group) was low in cohesion. (A group is high or low in cohesion depending upon the degree of mutual attraction of the members of the group.) Attitude change was assessed by testing with an attitude scale before and after a period of undirected discussion about a number of racial groups. The stability of any change was assessed by a third test some weeks later. A control class completed the attitude scale at the same time but without intervening discussion. It was found

that free undirected discussion by the two types of small groups resulted in a significant change of attitude, irrespective of the type of group. Further, this change was relatively stable over a short period.

A study on the comparison of attitude changes toward intercollegiate athletics elicited by live and videotape classroom presentations was conducted by Croft et al (1969). The subjects were 220 introductory sociology students at Brigham Young University who were randomly assigned to two experimental groups and one control group. A 21-item Thurstone scale was constructed which measured attitudes toward intercollegiate athletics. Pretesting with the scale showed attitudes on the campus to be somewhat favourable toward athletics. It was decided to attempt changing attitudes in a direction less favourable toward athletics. A seven-minute script was prepared arguing against the necessity of intercollegiate athletics and concluding that it has no place on the college campus. The design included the presentation of identical material to two experimental groups using different communications media. The first experimental group received a live presentation of the anti-athletic script by a psychology professor. The Thurstone scale was then administered immediately following the presentation. The second experimental group received the same presentation except, instead of a live presentation, they were given a videotape playback of the same professor presenting exactly the same material. They were also given the Thurston scale immediately following the presentation. The control group (no program) completed the Thurstone scale to establish a baseline for comparison with the two experimental groups.

An analysis of the results indicated that the live treatment group elicited significantly more change than the videotape treatment, and the videotape presentation elicited more change than the control group. The findings strongly supported the hypothesis that the presentation of information via videotape is less effective in producing attitude change than a live, in-person presentation of the same material. The suspicion that males and females would be differentially influenced by the presentations was not confirmed by the data. This study did not investigate the amount of information retained from a videotape presentation as compared to a live presentation, nor did it examine the permanency of the effects on attitude change, produced by the presentation under each condition, over a period of time. Although this study employed college students, there are some similarities and differences in findings to the Alberta Education project described in this report. Results are similar with respect to program impact in that both types of approaches changed attitudes. Results are different since, in comparing intervention approaches, the Alberta study showed slightly more impact for a T.V. (videotape)--teacher presentation initially. However, later measures showed no difference. Retention was studied in the Alberta project and it was found that the newly-established attitude levels were maintained over time.

According to Sarbin (1964) and other role theorists, the technique of role playing or disability simulation is an effective agent of attitude and behavioral change. In those cases where role playing has been used as a technique in modifying attitudes toward the disabled, the object was to create empathy for disabled persons. The experience

appears to be capable of producing significant and lasting changes in perceptions and attitudes.

A study by Wilson and Alcorn (1969) attempted to discover if there is a relationship between simulation of a disabling condition for an eight-hour period and changes in attitude toward disability. More specifically, if a change in attitude does result from the simulation experience, is it measurable using the Attitude Toward Disabled Persons scale (ATDP)? Furthermore, if attitude change occurs, will it be evidenced by student narrative accounts of the simulation experience? Eighty college students were randomly assigned to experimental and control groups and all were given Form A of the ATDP scale at the beginning of the experiment. Subjects in the experimental group were given the assignment of living with a simulated disability for a continuous eight-hour period. They were allowed to choose any one of the following disabling conditions to simulate: (1) blindness, (2) deafness, (3) loss of dominant arm, (4) loss of lower limbs (confined to a wheel chair). All subjects were asked to keep a detailed written account of their experiences. At the end of the experiment, written assignments were collected and Form B of the ATDP was administered to both experimental and control groups. Analysis of the results indicated that both groups showed higher scores on the ATDP Form B than on Form A. Although the mean increase for the experimental group was slightly higher, this difference was not significant. Nor were there any significant differences when the factors of age, sex, educational background and type of simulated disability were considered. The small and statistically insignificant differences between changes in attitude scale scores of the experimental group and the control group may be attributed to the following possible reasons:

1. A lack of sensitivity of the ATDP to reflect the type of quick attitude change which might have resulted from the experimental assignment.

2. The experimental assignment may have contributed only to the disruption of existing attitudes and not to the formation of new ones.

3. The assignment may not have affected either attitude development or attitude evaluation. However the written reports of the students clearly indicated that the simulation experience not only caused a great deal of psychological stress and discomfort but that the experimental assignment did have a bearing upon attitude development and was a useful stimulant to both attitude formation and evaluation. The above experience of Wilson and Alcorn (1969) somewhat parallels a concern expressed in the Alberta study (see Limitations and Delimitations section); namely, that in studies of this type, the use of the ATDP might well be supplemented with a multi-factor attitude scale since the ATDP may not be sufficiently sensitive. In the Wilson and Alcorn study, a number of differing types of handicapping conditions were represented in the experimental conditions. A scale with sub-tests addressing specific handicaps may have been more appropriate. Similarly, in the Alberta study, no differentiation of attitudes among various types of disabilities was studied.

A study by Clore and Jeffrey (1972) showed that playing the role of a disabled person produced significantly positive results in attitude change toward the disabled. The experiment explored the effects of emotional role playing on interpersonal attitudes toward the disabled. The role playing consisted of travelling about the campus in a wheel chair for an hour and the design involved three treatment groups (role players, vicarious role players and controls). Compared to the control group, the subjects in both the direct and vicarious role playing groups led to more positive responses to: (1) a specific disabled person in a wheel chair (the experimenter), (2) a series of issues concerning disabled students in general, and (3) a disguised attitudinal measure given by telephone four months later. The results showed that role playing a disabled person has both immediate and long-term effects on interpersonal attitudes toward disabled persons. Those who played the role of a disabled person by travelling around in a wheelchair responded significantly more positively than control subjects on measures which included a semantic-differential type scale and an attitude scale. Subjects who experienced the role playing vicariously (by watching) displayed similar effects. In addition to the evidence from the above-mentioned measures, the subjects' open-ended descriptions of their role playing experience also indicated positive attitude changes toward disabled persons.

Research (Rusalem, 1967; Lazar, Gensley and Orpet, 1971; Siperstein, Bak and Gottlieb, 1977; Cohen, 1977; Clore and Jeffrey, 1972; Marsh and Friedman, 1972; Donaldson and Martinson, 1977; Rapier et al, 1972) indicates that the use of various instructional approaches, such as special programs and revised curricula in certain subject areas, for example, shows promising possibilities in modifying attitudes and producing greater acceptance of handicapped persons. Rejection of the handicapped very often stems in part from not knowing how to relate to them in terms of their disability, a factor which can be reduced through an instructional approach. The use of disabled individuals as resource people, both in the study of disabilities and in other contexts, would increase the effectiveness of an instructional approach (Cohen, 1977). Lazar, Gensley and Orpet (1971) designed a four week instructional program to be used with eight year old gifted children to stimulate more positive attitudes toward the disabled. Both the children's comments and their scores on the Attitude Toward Disabled Persons scale revealed a significant change in response to the instructional program.

Marsh and Friedman (1972) investigated the attitudes of 215 sighted high school students toward blindness and, following a special vision education program, the efficacy of such a program on modifying stereotypic attitudes toward blindness. The purpose was to promote the integration of blind students into the social and educational life of the school by eliminating the mystery surrounding blindness and the resource room program for blind students. The special program or instructional intervention provided the sighted students with the opportunity to:

1. Act out and discuss, with blind students, simulated situations in which stereotypic and non-stereotypic attitudes toward blindness were manifested.

2. Inspect, discuss and practice using aids and appliances (e.g., braille, white canes) blind people require in order to learn and to be mobile.

3. Practice travelling (blind folded and using a long cane) in order to experience some of the problems which arise in travelling without sight.

The program lasted for five instructional periods. An attitude toward blindness scale was administered before and after the program was completed. The findings showed that the sighted students responded positively in attitudes and behavior toward blind students. Administrators of the school and the teachers who taught the program also reacted favourably.

Rusalem (1967) reports a similar experiment conducted in a girls' parochial high school in Brooklyn, N.Y. in which an attempt was made to ascertain the effects of attitude change procedures (a special program consisting of six one-hour sessions) upon feelings toward deaf-blind persons. A deaf-blind attitude questionnaire administered to 450 students identified two groups of students:

1. a group of 14 students with the highest attitude scores who regarded deaf-blind persons favourably, and

2. a group of 14 students with the lowest attitude scores who regarded deaf-blind persons negatively.

Both groups, functioning independently, were given the special program, which consisted of providing information and participating in activities related to various aspects of deaf-blind persons, including meeting and communicating with them. The experimental design included pretest, program and posttest. Analysis of pretest and posttest scores disclosed that the attitudes of the negative group changed significantly in a positive direction while the attitudes of the positive group did not. The lack of change in the positive group may be attributed to the fact that high scorers in this experiment tended to be more realistic in their attitudes about the capabilities and prospects of deaf-blind individuals. A similar phenomenon was noted in the Alberta Education study. Groups of girls who had higher levels of positive attitudes initially did not tend to have average levels altered as frequently as boys.

In the Rusalem report, follow-up interviews conducted after termination of the program revealed some behavioral changes in the participants. Twelve of the 28 participants engaged in one or more self-initiated programs relating to deaf-blindness and seven of these subsequently volunteered to assist in recreation programs. Rusalem further reports that studies conducted in association with this project have revealed that even a superficial approach, such as a brief talk by a deaf-blind person in a school, can initiate perceptual movement which may be used as a subsequent base for other activities aimed at attitude change. Here again, the similarity with the Alberta project as described in this report is noteworthy. The live Alberta Education presentation was of

very brief duration--only 30 to 40 minutes. However, measurable changes were produced.

Integrated school experiences can serve as an intervention treatment in modifying attitudes toward the handicapped. Rapier et al (1972) conducted a study in which an assessment was made of changes in attitude toward orthopedically handicapped children of 152 elementary school pupils in grades 3, 4 and 5 which resulted from an integrated school experience. A group-administered rating scale based on the semantic differential technique was administered as a pretest to the children in grades 3, 4 and 5 before the opening of the orthopedically handicapped unit (enrolment of 25 children) in the school. The rating scale was re-administered as a posttest to the same children about one year later, who were then in grades 4, 5 and 6. At that time, all of these classrooms had had at least one orthopedically handicapped child integrated into the classroom for part or most of the day during the year. Also, the non-handicapped children had observed or had contact with handicapped children on the playground and in other school activities. Analysis of the results showed that, after integration, non-handicapped children had developed a more positive attitude toward the orthopedically handicapped. Before integration, boys and girls differed in attitudes but the difference disappeared as a result of integration. Integration increased differences in attitudes between older and younger children toward handicapped children, with older children developing a more realistic attitude than younger children. These results are congruent with the findings of the Alberta Education study; namely, the elementary students in integrated schools are more amenable to attitude change than their counterparts in non-integrated schools.

There are a variety of instructional approaches which may be used to teach children about handicaps with a view to changing attitudes. One which has considerable merit and which can be readily implemented in a school program is the curricular approach. With very young children, the subject of disabilities can be dealt with incidentally and informally as questions arise. In elementary, junior and senior high school, the study of most handicaps can be included as a regular part of the social studies, science and/or health curriculum. Many social studies curricula in elementary include themes dealing with respect for differences among people and man's adaptation to his environment. This could easily be expanded to include the study of differences which relate to physical and mental disabilities and how disabled persons can function successfully and contribute to society. Most handicaps can be studied in science and health units which deal with the functioning of the body. Optimally, the study of disabilities could be both a formal part of the school curriculum and a subject to be explored as the need arose in the course of usual school activities (Cohen, 1977).

Group discussion is very commonly used as an instructional method for effecting change in children's attitudes toward the handicapped. Group discussion may be undirected (children discuss handicaps without a teacher present) or directed (discussion under the direction of a teacher). Group discussion is most effective when used in conjunction with some form of presentation about disabled persons. Such presentations may include one or more of the following: a live presentation by a

disabled person, a discussion by a panel of disabled persons, films, slides or a videotape. The recommendation in the Alberta study that an audio-visual kit and discussion guide be made available to teachers addresses this need. There is considerable evidence to show that children's attitudes toward a handicapped person will change when group discussion is used as part of an instructional approach, under controlled conditions and circumstances. For example, in a study on the effects of group discussion on children's attitudes toward handicapped peers, Siperstein, Bak and Gottlieb (1977) found that, in undirected group discussion (no teacher present), children's attitudes toward handicapped peers clearly became more negative. The study did not examine the question concerning the longevity of the negative effects brought about by such group interaction. Miller and Biggs (1958) found that changes in attitude which occurred as a result of group discussion lasted for at least a period of two weeks. Our Alberta study indicated that retention lasts for as long as four to eight weeks. The findings indicated that children's interaction in groups may be an important factor in determining to what extent handicapped children will be accepted or rejected.

A study by Donaldson and Martinson (1977) on modifying attitudes toward disabled persons used a variety of intervention techniques including: a panel presentation and discussions by individuals with different visible physical disabilities (cerebral palsy, blindness, quadraplegia and paraplegia), panel presentation with no discussion by live treatment group, videotape presentation and an audio presentation. Differential effects of live, videotape and audio presentations were assessed, as were sex treatment variables. Results suggested that both the live and video presentations had significant effects on attitudes as measured by the ATDP. No significant differences were found between the responses of male and female subjects. The finding of significant effects on the attitudes of subjects viewing a live or videotaped discussion by a panel of physically disabled individuals suggests that these may be an effective means of facilitating positive attitudes toward disabled persons within a relatively short time.

From the studies cited, it appears that there is considerable evidence to show that a variety of intervention treatments and instructional approaches can be effectively used to modify attitudes toward handicapped persons.

APPENDIX B

Classroom Intervention Programs for Changing Student Attitudes Toward Handicapped Persons

CLASSROOM INTERVENTION PROGRAMS FOR CHANGING STUDENT ATTITUDES TOWARD HANDICAPPED PERSONS

Report by Lee Bussard
Project Coordinator

Project planned and organized by Lee Bussard and Wetaskiwin School District - November 1979 to July 1980

Funded by the Planning and Research Branch
Alberta Education

July 1980

CLASSROOM INTERVENTION PROGRAMS FOR CHANGING STUDENT ATTITUDES TOWARD HANDICAPPED PERSONS

Coordinator's Report

The purpose of this report is to provide additional background information related to the project as well as provide a description of the contents of the two classroom programs which were used as interventions with two experimental groups of students.

The project was initiated by Mr. Lee Bussard of Wetaskiwin, Alberta. Mr. Bussard who is a handicapped person, works out of an office in Wetaskiwin and is involved in various activities designed to increase "public awareness for the disabled".

Mr. Bussard enlisted the support of the Wetaskiwin School District No. 264 in preparing a research proposal intended to explore student awareness of and attitudes toward handicapped persons and to evaluate the effectiveness of two different program presentations about the handicapped in changing student attitudes. Mr. Bussard secured approval and funding for the study from the Alberta Minister of Education, the Honourable David King. The project was supervised by the Planning and Research Branch of Alberta Education. Mr. Peter J. Baker, Education Consultant, was appointed Project Liaison Officer and was responsible for developing the research design, questionnaires and procedures. Mr. Baker provided on-going support and supervision during the course of the project and was involved in the preparation of the final report.

A population of communities with schools offering instruction in grades 6, 8 and 11 was identified in the following manner. From a list of high schools located in Educational Zones 2, 3 and 4 in North Central Alberta, a sample of 75 schools offering grade 11 was randomly selected, thus identifying 75 communities with schools. Schools in each of these communities, offering instruction in grades 6 and 8 and which were in closest proximity to the high school, were then chosen to complete the sample. In some cases, two or three of the grades (i.e. grades 6, 8 and 11) were taught in the same school. This resulted in a total of 134 schools in 75 different communities participating in the study. From the 75, samples of 25 were then randomly assigned to form three equal representative school population groups (identified as Groups B, T and C). Groups B and T were the two program (experimental intervention) groups, while Group C served as the no program control group. From the schools within each group, one classroom of students from each of grades 6, 8 and 11 was selected by the principal. Thus, each of the three groups consisted of 25 classrooms of each grade for a total of 75 participating classrooms per group or a total of 225 classrooms in the three groups.

Group B (for Bussard) students were presented with a program of slides and a talk about the handicapped by a handicapped person. Group T (for T.V. and Teacher) students were presented with a video-tape program and a discussion about handicapped persons under the direction of a regular classroom teacher. These two groups of students were administered the Attitudes Toward Disabled Persons Scale-Form A (ATDP) immediately following the

program presentations (first posttest - on the same day or on the following day). A sampling of these students also completed questionnaires designed to measure perceptions and opinions about the programs presented. A second posttest, using the same form of the ATDP, was administered some four to six weeks later.

Group C (no program - control group) students were administered the ATDP Scale during the first testing period.

Participating teachers of classes in which programs had been presented completed program opinionnaires.

Contents of Program Presentations

Two experimental programs about handicapped persons were developed for use as presentations in classrooms.

Presentation I: Slides and talk by a handicapped person, Mr. Lee Bussard.

Presentation II: Video-tape followed by discussion by a regular classroom teacher.

Each presentation required 30 to 40 minutes. Mr. Bussard prepared the slides and talk and also assisted ACCESS personnel in the preparation of the video-tape.

PRESENTATION I - SLIDES AND TALK

The first thing for us to keep in mind is that the word "handicapped" and the word "disabled" pretty well refer to the same thing, when we refer to people with handicaps and disabilities. Another word people use a lot is the word "cripple". "Cripple" is a bad word when we refer to people that are disabled or handicapped. It is an old fashioned word and it is good for people to stay away from it.

Let us remember that there are many kinds of handicaps and disabilities. (First I will name a bunch and let the class name a few). But I am not here to tell you about one particular disability, but more to give an overall talk on people that are disabled to help you become a little more comfortable around disabled people and to help you realize that disabled people are people first.

First Slide. (Slide of a man with a seeing eye dog.) One thing that we all want to be able to be is independent. The first time that we become independent is at a very young age when we begin to walk. Walking is one of the first physical things that we learn to do in order to be independent. Disabled people also want to be independent. That is why someone blind might use a seeing-eye dog or a white cane. A seeing-eye dog gets more training than any other dog and only is good as a seeing-eye dog at a young age.

Second Slide. (Slide of a gentleman on crutches.) Some disabled people who can walk, but not very well, must use crutches or braces. Once again, it is a way they can be independent.

Third Slide. (Slide of a gentleman in an electric wheelchair.) Some disabled people cannot walk at all, so this is the purpose of a wheelchair. And here again, it is another way for that particular person to be independent. Have you ever heard someone saying, "Look at that poor person in a wheelchair," or "Ah, isn't that bad to see a person in a wheelchair?" But why not look at it this way. Without the wheelchair it really would be too bad or without that wheelchair they really would be a poor person. Therefore, the wheelchair really gives some kind of independence. There are basically two kinds of wheelchairs; one that someone can operate themselves and wheel themselves; and one that people might have motorized. This can be hooked up in a way that someone can use many parts of the body to operate a button to put it in motion, e.g. one finger, head, mouth, knee, foot, etc.

Fourth Slide. (Slide of a disabled person eating.) All people, no matter who have to eat to stay alive. Another word for eating is the word "survival". We all have to eat and drink to stay alive. Disabled people are no different. A lot of people think that because someone is disabled, in a wheelchair or have some other type of disability, they do not need a lot of energy so eating is done very seldom. Of course this is not the case; all peoplehave to eat two or three times a day. Another thing to keep in mind is that often-times when we see people eat in a public place we see how polite they are and how nicely they eat. When some disabled people eat they spill food or make a mess around where they eat, and for someone watching them eat, it may not look niceto their way of thinking. But if someone does make a mess while trying to eat in a public place or anywhere, SO WHAT! The reason why people make a mess is so someone can clean it up. So if disabled people eat in this manner and other poeple around get offended, that is something other people have to deal with. Disabled people eat the way they have to eat and that is just the way it is; they are not hurting anyone by it.

Fifth Slide. (Slide of someone using sign language.) Another important thing that we do all day is communicate. Communication is very important in our society. The biggest way people communicate is body language--the way they use their eyes, their facial expressions and their body. That is why with disabled people, if they cannot verbally communicate, watch how they smile, frown, use body gestures, etc. Another form of communication is touch. When we greet people we shake hands; in sport they slap people on the back and so on. There is nothing wrong with touching someone while talking with them and with disabled people it is no different.

Sixth Slide. (Slide of a word board with everyday words, the alphabet and numbers 0-9). This is a word board used by persons who can see and hear but cannot talk so they point to what they want to say. There is also a computer out now. The computer is shaped like a calculator and when the right combination of numbers is punched into it, the words come out. Also, it is important when communicating with people in a wheelchair to try and get on their level; while talking to them crouch down, or sit across from them so they are not straining their necks to look up at all times.

Seventh Slide. (Slide of a man in a wheelchair at work.) Working is another thing that is important to all of us and the disabled people are no exception. Many people think that if someone is in a wheelchair or walks and talks funny that they are stupid so they would not be capable of a job. Disabled people are capable of doing many kinds of jobs if given the opportunity and the chance. To be able to work is a way to be able to contribute to society and the world around us. It is a matter of dignity, and self-pride important to all mankind.

Eighth Slide. (Slide of a person in a wheelchair going up a ramp into a house.) A big problem for disabled people is getting around in society. The way we build our sidewalks, shopping places, and public buildings is often not accessible to allow disabled people to go inside. Everyone, no matter who, has a right to go into a public building. Another thing we must remember is that when we build a building and make it accessible, we are helping more than just the disabled people in wheelchairs; we are helping anyone with trouble walking, old people, pregnant ladies, small children, people with their hands full of many packages, etc.

Ninth Slide. (Slide of a flock of ducks swimming on the water.) While you are looking at this slide, let me recap what we have covered so far: Independence, Survival, Communication, and Working. As you can see these things are important to all people--even disabled people. This is a nice slide to look at. When we look at people we usually become accustomed to them as being nice to look at. There are many people who, because of disabilities, etc., might not be nice to look at. How do we react to people like this? Do we shy away from them or ignore them? We must remember that everyone has feelings and knows how to cry or laugh; disabled people are no exceptions.

Tenth Slide. (Slide of a young man burned in a fire.) Not like the last slide that was nice to look at, this picture shows a disabled person that may be hard for many people in society to look at because of the way he looks. We have to accept people for more than just the way they look on the outside.

Eleventh Slide. (Slide of a watch used by a blind person). This is the type of watch that someone who is blind uses to help them tell time. This is also used by people with learning disabilities to help comprehend numbers. Every school in Alberta has students with learning disabilities--people who cannot read well, who are slow at writing, or can't do well in other subjects. For that matter all people no matter who they are have some kind of handicap--whether it is trouble with something at school or trouble with something in the home. The neat thing about having a handicap is that you are always working to overcome whatever it may be.

Twelfth Slide. (Slide of a telephone.) Do you ever think of the things we do each day like dial a telephone, put on our clothes, open a door, eat our food, etc. Do you ever wonder how you would do these things if you had no arms, or could not move from the waist down? We tend to take a lot of things for granted because we can accomplish them so easily. Maybe some day, just for a learning experience, have a time where you are disabled yourself: be blindfolded, plug your ears, tie your hands behind your back, or even use a wheelchair, and try to do things the way you always have.

Thirteenth Slide. (Slide of a mentally retarded person playing the piano.) Of all the handicaps we misunderstand, it has to be the mentally handicapped. Also, of all the handicaps we have to make fun of the most, it has to be the mentally retarded. What do you hear little kids say a lot when playing and a disagreement arises, "Oh you retard" or "Boy are you ever mental." What we must try to keep in mind is that mentally retarded people or mentally handicapped, as the preferred word is, are not dumb or stupid but their problem is they are slow. They are capable of doing many things. People should realize that they do have potential and the biggest thing one must have is patience with the mentally handicapped.

Fourteenth Slide. (Slide of a girl in a wheelchair, with a head brace, body cast, leg braces.) This is a girl who needs special equipment to help her out. She has feet braces to help her straighten her feet out, she has a body brace to help her sit up straight in the wheelchair, and a head brace to help her hold up her head. Many disabled people need special equipment for one reason or another--braces, hearing aids, things to assist in going to the washroom. A lot of the time people look at disabled that use special equipment and get very embarassed. Or they point and wonder, "what is that?" But there is nothing to be embarrassed about. People wear shoes to help them walk, so disabled people need special equipment to help them.

Fifteenth Slide. (Slide of five girls in a wheelchair.) These five girls are all sisters. There are many ways people become disabled. You may be born with it because of the fact that it runs in the family; this is called hereditary. It may be an accident at birth; for example, lack of oxygen or the way in which the mother bears the baby, could cause a disability. An accident during life; for example, a car accident, farm accident, etc.--or diseases or sickness could cause disabilities. It is easy to understand then how anyone can become a disabled person; that is why it is important to look after yourself and take care of your body.

Sixteenth Slide. (Slide of a girl in a wheelchair playing a guitar to a group of people.) We all like to have a good time, go to parties, out for dinner with our friends and families, or to a movie. This is called having a social life. This is important to all people, even disabled people. Having a social life is an important part of growing and developing into a better all around person and disabled persons like to have a good time the same as anyone else.

Seventeenth Slide. (Slide of a lady working around her home.) When people get through school and college, there comes the time when they go out on their own. Many disabled people live on their own, do their own cooking, cleaning, and general housekeeping. This once more is a part of being independent, an important thing to everyone.

Eighteenth Slide. (Slide of a man driving a car using hand controls.) Many disabled people drive their own cars. If some people cannot use their feet, it may be hooked up in such a way that it will be done with hand controls and vice versa.

Nineteenth Slide. (Slide of a lady crossing the street with a white cane.) Many times we see disabled people such as this and we want to help them as a first reaction. It is important to remember to never do for a disabled person what they can do for themselves. It is also good to remember that if we are going to help, always ask first to see if they need help. A blind person uses a white cane as a means of identification. When we see someone with a white cane it tells us they are blind; someone in a wheelchair, someone on crutches, this tells us they are disabled in some way. Many people wear medical alert bracelets if they have diabetes, or a blood disorder, or some sort of hidden disability that we should be aware of in case of an emergency.

Twentieth Slide. (Slide of a young lady holding a girl.) This little girl needs help with everything: feeding, dressing, going to the washroom, etc. Other disabled person even though they use a wheelchair may not need any help with any of these things. That is why it is important not to put all disabled people together in one category. Some disabled people need a lot of help; some need very little. Also remember that disabled people are like anyone else, they have relationships. Disabled people get married, go out on dates, raise families, etc. It is important to all people to receive affection, to have someone to talk to and to care about them as well as love them. Disabled people are no different in this respect; they have a need for affection and to have their sexual needs fulfilled the same as anyone else.

Twenty-First Slide. (Slide of a man in a wheelchair smoking a cigarette.) I am not saying whether it is bad or good to smoke and drink alcohol, but what I am saying is that just because someone is disabled, does not mean that they do not do this type of thing as anyone else. A lot of times we tend to think that disabled people are all little angels and goody goodies. Disabled people are like anyone else, there are bad ones and there are good ones. The disability does not change that.

Twenty-Second Slide. (Slide of a large barge on a lake carrying wheelchairs and people as passengers.) Recreation is an important part of everyone's life; the same is true for disabled people. Sports and recreation play an important part in their lives. Recreation can be anything from doing a physical activity to playing a quiet card game. This is the type of boat that helps someone in a wheelchair to go for a boat ride without getting out of the chair.

Twenty-Third and Twenty-Fourth Slides. (Slides of two people in a wheelchair playing ping pong and a slide of a person in a wheel chair and on crutches shooting a bow and arrow.) Playing ping pong and archery are other sports many disabled people can do. When the ping pong ball goes under the table or when the arrows run out, disabled persons must get them themselves, if possible. You should not spoil someone just because they are disabled.

Twenty-Fifth and Twenty-Sixth Slides. (Slide of people in track and field; one person in a wheelchair is throwing the discus and the other slide shows a group of wheelchair people competing in a race.) Disabled people enter many competitions in sports such as track and field, basketball, volleyball, floor hockey, square dancing, etc. These may be done by people in wheelchairs or people with other types of disabilities.

Twenty-Seventh Slide. (Slide of a lady working with her hands.) The neat thing about many of the disabled people is the way that they adapt by using their mouth or different parts of their body. People with no arms may develop parts of their bodies so they can use their feet and legs to do things. If they cannot do it the common way, they learn to adapt and to try it another way.

Twenty-Eighth Slide. (Slide of a man in a wheelchair that presses weights.) I hope after hearing me today you all can be a little bit stronger, not like this guy in the picture. I don't mean that kind of strong, but strong enough to look at a disabled person and see the person first, then the disability.

Twenty-Ninth Slide. (Slide of a girl in a wheelchair working at school.) Everyone in Alberta must go to school--disabled or not disabled. It would really be good if disabled people could go to ordinary schools along with everyone else, but this is not always practical. That is why there are special schools for the disabled people--so they can receive more time spent with them if necessary and also special equipment if necessary, e.g. typewriter, tape recorders, etc. Whenever possible, though, it is important to put disabled students into the regular school systems.

PRESENTATION II - VIDEO-TAPE

Speaker. (Disabled people skiing down a hill.) The first thing for us to remember is the words "disabled" and "handicapped" mean the same thing. There are many different types of handicaps and disabilities. Some people have physical disabilities such as deafness and blindness, or something which makes it hard to do physical things. It could be anything from missing a toe, an arm, or a leg to having something wrong with the muscles and coordination. Sometimes people see a person with a physical handicap that makes it hard for them to walk or talk, and they may think this person is drunk or retarded. This is not necessarily true.

Mental handicaps or disabilities are something altogether different. There are many types of mental handicaps, although mental retardation is the most common. Some types of problems just make people a little slower at doing things. They may have trouble learning certain things in school, or understanding how some things work, so they have to work harder at that one subject--(which is sort of a handicap.)

Disabled Man Speaking and Skiing. I never knew what it was like to walk as an average person does, and so any change I had to make with regards to walking or any other kind of action, became a normal routine for me. It wasn't something I had to learn all over again. The question about falling, oh ya, I still fall quite a bit; actually in fact I'd get a little worried if I didn't fall because I think I wouldn't improve if I didn't challenge myself more and force myself to do that. You're bound to fall sometime. It's easy to get up; I'm used to falling. It's not that, but I kind of get teased sometimes because when I do get up, I have to get myself adjusted properly back into my braces and everything just set right. In a way I have to shift and boogie around a bit. I guess for someone watching all of this going on it looks a little strange and I've always thought maybe I should put it to music or something like that and refer to it as Robinson's Rumba or the Disabled Disco, or something along that line.

Ed Wright, Comedian. (Disabled, walking down the hall to stage.) Hallowe'en was always a bad time for me because no matter what costume I wore everyone knew who I was. Practical jokes, my therapist used to play practical jokes on me all the time, like the time she gave me rubber crutches and yelled "fire."

Speaker. Ed Wright is a stand-up comedian in a Toronto comedy night-club. Now to be a stand-up comedian is one of the most difficult forms of entertainment. The degree of strength, combined with constant timing required to make people laugh is awesome, yet Ed does it. Part of his routine is centered around being handicapped, and how negatively people react to that side of him.

Lee Bussard. (Speaking in Telethon.) Right now while you are sitting with your family, point to your T.V. and say, "You see that guy, well if you ever see another guy like him, if you ever see another guy in a wheelchair, don't make fun of them, don't stare, they are people." Together with that attitude and help, like the people from A.C.T. Foundation, Alberta will be a proud place for everyone to live, disabled and those who are not disabled. Ladies and gentlemen, people first, disability is way behind. THANK YOU!

Speaker. Handicapped people are just like anybody else, just like you and me. They get mad, and have bad days just like us. A smile can brighten up anybody's day and handicapped people do just as much smiling as anybody.

(In the background there are disabled children unloading from a bus and entering a school for the disabled.)

It is true that some disabled people need to be able to go to special schools; handicapped want to be able to go to normal schools along with everyone else, but it is not that easy. For instance, many of our schools along with lots of other buildings in our community are built in such a way that wheelchairs cannot enter inside them. Another problem is that some handicapped people look different than the other students; maybe their faces seem funny to our way of thinking, or maybe they have scars; maybe they can't always control their muscles. Because of this the other students make fun of them, or are mean to them, but these are people that are the same as us. They have to go to school and work in our communities; they are able to work; they can learn and work and hold down a job just as well as anybody. All they need is the chance.

(A young girl is singing and it shows a disabled girl in a normal school with her friends.) (The next scene shows a tractor loaded with disabled children driving into Camp He-Ho-Ha.)

Counsellor. Socializing and fun and recreation; these things are important to us all. Camp He-Ho-Ha, just west of Edmonton, provides recreation facilities and programs for disabled persons of all ages.

Speaker. Recreation means a lot of things. Some people like to go swimming or watch football, or ride a horse; other people like to collect stamps or go to parties, or see a movie. Disabled people are no different from us all when it comes to recreation. They like to do all these things and many more. Did you know lots of disabled people play basketball and are really good at it? In fact, there are lots of sports organizations and clubs for the handicapped people and they travel all over the county and compete in different events. And lots of handicapped people paint and ski, go swimming and write poetry and collect coins and do many many other things that people enjoy. They also like to go to parties and movies and out to dinner with their families and friends. Sometimes this is difficult because some restaurants and theatres do not allow wheelchairs to come inside. But disabled people have lots of friends, and enjoy them just as much as anybody. Nobody likes to be alone all the time; friends are very important to all of us.

Disabled Man Speaking. (Showing a disabled man who can only use his mouth painting in his home.) I think that if you're handicapped you want to be out in the environment, bring some more money into the home. Finances are probably the biggest burden upon the handicapped, mainly because if it costs you $500 to live it would probably cost us $750 to $1000 for the equivalent lifestyle, because we have to pay people to do things for us. You have got to hire someone to do the things which you are not capable of doing yourself.

Speaker. Lots of people think because a person is handicapped they cannot have children. That is not true. Lots of disabled people get married and have a family and because the father or mother is disabled does not mean their children will be. Now a regular family like yours and mine with a mom and dad who are not disabled might have a handicapped child. This does not mean that other kids will be handicapped. It just means that that particular child was born with a handicap. Sometimes a child is fine when he or she is born but then a sickness or an accident later in life can give them a handicap.

Disabled Man Speaking. In the case of polio, it has nothing to do with the reproductive organs, so we have solved this by having kids like anyone else.

Teacher at the Art School for Disabled and Non-Disabled. A course is being constructed where an attempt is being made to integrate the handicapped with the non-handicapped in an art course. People sometimes assume that those in wheelchairs are mentally disabled as well as physically disabled. This is not true. If experiences can be shared with one another, ignorance of this sort can be eliminated.

Speaker. (Picture of a blind man and a lame man walking out onto a stage.) One is lame and one is blind. That attitude is kind of a shallow point of view in light of what these two men do in the area of music. The more enlightened attitude is to appreciate the fact that Sonny Terry and Brownie Magee are two of the best loved blues musicians in the world. However, if they'd taken their disabilities with the same negative approach that most of us felt about them, they would not have achieved their current greatness. That is why we sincerely believe that our attitude towards the disabled is their biggest handicap. Some people with handicaps do need help, but most disabled people live in their own homes and have their own jobs and hobbies. Lots of them drive their own cars.

(Picture of a disabled man entering his specially equipped van.)

For some people with certain kinds of handicaps this means they have to change a few things around home, like making the tables and sinks a little lower so they can reach them in the wheelchair, or putting a handrail on the bathtub so they can get out of the tub O.K. But these things are not too hard to do. Sometimes it costs a little more money to fix things up, like in a car for instance--where a handicapped person might need all the controls, including the brakes where his hands can reach them because his legs don't work too well, or maybe putting a special piece of equipment in a van so they can get in and out by themself, or maybe putting in an elevator where stairs might have been. But the disabled don't mind that; they like to be able to be at home, and this kind of equipment makes it possible.

(Picture of a disabled man in his house getting ready to go outside into his car.)

Something that is very important to all of us, including disabled people, is how we look and feel and how other people look at us. We all like to think that we are attractive to the people around us. If you are a guy, you like to think that you look pretty good to the other guys, especially to the girls. The girls like to look the best for their friends too, so we all pay attention to how we dress, and brush our hair and so on before we go out each day; so do handicapped people. They like to look and feel the way we all do, and they pay as much attention to their appearance as anybody.

Lee Bussard. (Telethon.) If you see a mother walking down the street and the little boy might see someone like myself and say "Mommy, how come that boy walks like that?" and the mother will go, "No, no, don't look at that!" can you imagine how many people have grown up that way because the mother pulled them away.

End. Blake Emmons singing "Sunshine On My Shoulders" while a young disabled person sits on his knee. In the background they are showing disabled people skiing, flashbacks of the show.

Speaker. (Fading in and out a picture of a man running and a person in a wheelchair wheeling himself around in the sunset.) Put yourself in our shoes; think what you'd do if you'd had a child that was handicapped. How would you react if something should happen to you and you were disabled for life? We are people, with varying abilities, we all have feelings, goals and potential. Society has a tendency to emphasize a person's inability. They must begin to look at the real person, not just the disabilities. You and me, all of us as individuals simply want to live with the same freedom, rights, and dignity as everybody else.

UNSTRUCTURED FEEDBACK REGARDING THE PRESENTATIONS

Comments From Students on Presentation I (Slides and talk by Mr. Lee Bussard, a disabled person).

- I thought that film got a lot through my head. Mr. Lee Bussard explained a lot of questions my parents couldn't explain. Mr. Lee Bussard is quite funny.
- I think that all handicapped (disabled) people should be treated as everybody else because they are just as much people as everybody else.
- We should have more commercials and shows for people to take it more seriously. I have learned a lot about the disabled and I thank Mr. Lee Bussard for coming.
- I think the program was very well organized and I like Mr. Lee Bussard's way of discussing it with us.
- I think the program was more effective having a disabled person an an instructor.
- It was a very good film and I liked Lee Bussard because he had a lot of jokes.
- Lee Bussard was very interesting and I would like him to come back.
- A program like this is meant to teach people to understand the handicapped. It was very interesting with the organization and Lee speaking to us.
- I always used to feel uncomfortable around handicapped people, but Mr. Bussard and this program, made me feel better around handicapped people. The program was interesting and easy to understand.

- I like the way that Mr. Bussard can accept the fact that he has an illness and nothing is going to change it. I also like the jokes he made about himself and all the handicapped people.

- I really liked the production. I learned a lot from Lee. It changed my opinion and attitude toward the disabled. It changed my mind. I used to think that disabled people were dumb, but Mr. Bussard said that they are all like us. If I hadn't seen the production I would still think the same. I am glad that I heard and saw it. How come the other grades did not get to see the program?

- It was a very good program and helped me learn about handicapped people.

- I think that it was a very good program and also I think that all the other provinces should have a program like this one. It was very well done!

- I have a brother who has a mental handicap. At first he embarrassed me. After the program I learned that I can deal with him. He goes to a handicapped school in Red Deer. I have been to this school many times; I know now how to cope with people there. I feel that this program has helped even more.

- That program was done very well and has made a great improvement in my knowledge of the handicapped. I wonder why though, how come the other classes never got a chance to see and hear Mr. Bussard? It really changed my opinion about them.

- I think the program should go into more detail. But I like Mr. Bussard. I think his jokes make everybody a lot more relaxed.

- I enjoyed Mr. Bussard, I like how we can all talk about the handicapped people.

- Handicapped people are very easy to get along with. Yes, my friend is just like me.

- It was a good program and I hope Mr. Lee Bussard can come back again and show some more slides about the disabled.

- I think every school should have a program like this.

- Handicapped people are just everyday normal people to me.

- I would like Mr. Bussard to return again.

- Please come back with more slides Lee.

- Not enough slides.

- Good program and right to the point.
- Mr. Bussard was the hit of the whole program.
- This program was very informative and I think that there should be more time.
- If they are considering continuing this program, make it longer please.
- More information should be given so that it would be possible not only to tell the difference between the handicaps, but also to tell the difference between a disabled and a drunk.
- It made me realize and think how lucky I am not to have a handicap.
- Make the program longer.
- I think disabled should be allowed to come to our school.
- This is a very good program. I understand how a handicapped person feels and I wish other people would too.
- They should have one like this in every province.
- I think we should have spent more time talking.
- Presentations such as this should be shown throughout Canada.
- I thought our problems were bad enough but take a look at their problems compared to ours.
- This program was good because it taught me to behave around handicapped. I think that the program was neat and Mr. Lee Bussard is a really nice guy. Let the disabled have jobs like us and let the disabled be our friends, please.
- It was nice of Lee Bussard to come and spend some time with us.
- I did not really understand anything about the disabled until after we had our session with Mr. Lee Bussard; he is the best!!!!!
- I feel very comfortable around Lee, and I have no bad feelings for him.
- I am glad a program like this was presented because it used up a social class, but also gave me a better insight of all kinds of handicapped people.
- A longer and more in-depth discussion about feelings (held during presentation) would be a benefit--feelings towards the disabled.

- Very interesting and should do it more often.
- I feel that having Mr. Lee Bussard give the talk, rather than a person who isn't handicapped, we can see that there's no reason to be afraid or uneasy around most disabled persons.
- This program gives a clear picture on what it is like being disabled.
- More time for discussion.
- I think that the handicapped people are normal just like us.
- Lee Bussard is very good looking!!!!
- This program opened my eyes to a better understanding of the disabled people.
- I admire Lee Bussard for what he is doing.
- I think that Mr. Lee Bussard was a very good speaker and he changed my attitude toward the handicapped people and people like him should come around more often.
- Keep up the good work!!!
- I think that this information would be very interesting to the older people as well as the younger.
- Should bring some disabled kids with you so the students can talk to them.

Comments From Students on Presentation II (Video-tape and discussion by regular classroom teacher).

- It was very interesting and I thought it was a great educational experience.
- I can understand the handicapped people better now.
- They should have more of these programs.
- This program was easy for me to understand and interesting and it helped me to learn more about the handicapped people.
- I think the program was meaningful and helped my general knowledge of the disabled people.
- Studied in more detail.
- It was interesting but should be longer.
- If some of the disabled came to our schools the teachers probably would not be able to handle them.

- I feel as if I wanted to help them; it seemed I was there to help them. Maybe when I grow up I'll help the handicapped with their problems, I like and I want to show all people that I love handicapped.

- I think we should learn more about handicapped people.

- I thought that the issue on the disabled people was well represented.

- They should tell of the occupations and one day of their life.

- I would encourage this program to continue.

- I think that more programs like this should be shown to more schools. All grades should see this program because I thought it was very educational.

- I am in grade 12 and did not get to see the program and I think that you should look into showing it to all the other grades as well.

- I think the handicapped people deserve a lot of credit.

- The pace was just too slow to get my attention; they should speak more about the causes of disabled people.

- They should make bathroom doors wider so that the disabled can go too, when they have to go.

- This program changed a lot of attitudes in my class; I loved it. Handicapped people should be treated equal.

- Disabled people should be recognized; it is about time someone started opening a few doors.

- This program is very good for the people who do not know much about the disabled people.

- It should be taken through all the schools in Canada.

- It would be interesting to know more about how people get these handicaps.

- What kind of life does a handicapped person lead?

- I wish more people would participate in better understanding the handicapped people.

- The types of disabilities might have been explained a little better.

- I feel that not only should school children learn more about disabled, so should adults in our communities.

- We had a few intermittent and audio-visual problems but I felt that it was good and worthwhile.
- The presentation makes you really think what you would do if you were hurt and became disabled.
- If financial funding were made available, it would be nice to see a separate program for different grades. The money spent now was worth every penny. Would like to see more government funding for this kind of project.
- Very good program and getting a handicapped person would be a very good idea.
- This program taught me some things that I never knew about before.
- I really enjoyed the show.
- There should be more information about this subject.

Comments From Teachers on Presentation I (Slides and talk by Mr. Lee Bussard, a disabled person).

- Right on Lee, your doing a great job with these kids!!!
- The strongest part of the presentation was Lee Bussard himself.
- The entire group was very impressed by Lee. After the presentation we had hoped the whole school could have seen and heard Lee. We hope the program will be continued and expanded.
- KEEP ON TRUCKIN!!!! An excellent sort of exposure for any person, not just a student.
- This program was a very lively and interesting presentation, given in a comfortable, relaxed atmosphere. Mr. Bussard kept the class very attentive. The class offered comments freely.
- It was a most informative presentation. I think our time was profitably spent.
- WELL DONE!!!!!!!
- The speaker would have been more effective had he been in a small group situation, rather than addressing the entire senior high student body.
- The personality of Lee Bussard contributed a great deal to the program. His easy manner with the students led to their participation. Comments by students were positive.

- I am of the opinion that the slide presentation, presented at our school by Lee Bussard was most stimulating and informative to the overall student body. Certainly, it gave to them increased awareness of the needs, feelings, abilities and problems of our handicapped citizens.

- The program as presented was very effective. Lee is an excellent speaker and establishes very good terms with the students. Would perhaps like to see the following included: More specific information regarding certain handicaps in relationship to every-day activities and programs. Perhaps more information on rehab programs and training programs for severly handicapped.

  All in all the program was well presented, informative and well received by the students. As a basic awareness program it was very effective.

- EXCELLENT!!!!!

- Mr. Bussard is to be commended for sharing his insights with us.

- The presentation was excellent and I feel very worth while for the students. Perhaps with a little extra time the students could have had more time to ask questions. However, the real impact of the students will certainly be in the time after the presentation when they can reflect on the ideas presented. An informative and interesting program was offered by Mr. Bussard.

- Well Done!!!

- Could be edited. Became somewhat repetitious.

- The approach was pleasant and humorous.

- Very impressed with Lee Bussard's presentation.

- I think Lee Bussard is a remarkable man and the children all loved him. Their one comment was, he drives a Corvette! They were moved by the presentation and two little girls even shed a tear!!!

- The sense of humour which Mr. Bussard possesses is a pre-requisite for success in his program.

  Sense of Humour ---> Person <--- Handicapped Person

Comments From Teachers on Presentation II (Video-tape and discussion by regular classroom teacher).

- Very enjoyable, interesting presentation, focussed on real behavioral techniques, very realistic and an eye-opener.
- Students listened attentively.
- This was an excellent program. Classes that did not see the program wished that they could have.
- Comments by all the students were positive.
- Quality of the cassette could have been better.
- The films should be longer and more statistical.
- The presentation was very informative and interesting.
- Because the T.V. VTR produced a great deal of distortion some of the responses may have been influenced. A 16 m.m. film should be produced. I think it is unfair that Mr. Bussard should have to transport all that heavy equipment. However, the program should definitely be continued.

APPENDIX C

Administration Instructions, Study Instruments
and Questionnaires

STUDENT ATTITUDES TOWARD HANDICAPPED PROJECT

(Group B and T Schools)

INSTRUCTIONS FOR COMPLETING QUESTIONNAIRES

Thank you for participating in this project and assisting us in determining how Alberta students feel about handicapped people. You have very recently had a program about handicapped persons presented in your class. You saw and heard ONE of the following programs:

1. Slides and talk presented by Mr. Lee Bussard (Group B schools), or

2. T.V. (videotape) program and discussion presented by the teacher (Group T schools).

You are now asked to complete the questionnaire form which will be given to you by your teacher. Your answers will be combined with those of many other students to provide the information needed.

Do not put your name on the questionnaire. Your answers will be treated anonymously. This is not a test. There are no RIGHT or WRONG answers. We are only interested in your opinions. Work quickly. Your first impressions or feelings are often the best ones.

Your teacher will go over the instructions and examples with you so that you will know how to record your answers.

Please use a pencil.

Instructions to the Teacher

Three different forms of questionnaires (FORMS 1, 2 and 3) are to be administered to the students in your class within one or two days after the classroom presentation on handicapped persons. The first page of each form contains the same general information sheet and is to be completed by all students. The contents of each form are as follows:

FORM 1 (GREEN) - Student Attitudes Toward Handicapped Scale

FORM 2 (WHITE) - Program Evaluation Rating Scale

FORM 3 (PINK) - Program Opinionnaire

All students are not expected to complete all three forms. Students in your class are to be randomly selected to form three groups. One group will complete FORM 1 (GREEN); the second group FORM 2 (WHITE) and the third group FORM 3 (PINK).

Select the students and administer the questionnaires using the following guidelines:

1. Use the class register.

2. FORM 1 (GREEN) - Distribute FORM 1 to every 1st, 4th, 7th, 10th, 13th...etc. student on the register.

3. FORM 2 (WHITE) - Distribute FORM 2 to every 2nd, 5th, 8th, 11th, 14th...etc. student on the register.

4. FORM 3 (PINK) - Distribute FORM 3 to every 3rd, 6th, 9th, 12th, 15th...etc. student on the register.

5. Seat students in the same group together. This will help when going over the instructions and examples provided on each form.

6. Have all students complete the General Information page on the front of each form following the instructions given.

7. Start with the FORM 1 group. Go over the instructions and examples for completing the Student Attitudes Toward Handicapped Scale. Let students begin.

8. Go to FORM 2 group. Go over the instructions and examples for completing the Program Evaluation Rating Scale. Let students begin.

9. Go to FORM 3 group. Go over the instructions and examples for completing the Program Opinionnaire. Let students begin.

10. Please CHECK to make certain that students are placing the NUMBER of their answer in the space to the left of each item according to instructions.

11. Allow time for all students to complete all items on the form.

12. Forms are numbered and color coded. When students are finished, collect the forms from each group in turn thus keeping the same forms (colors) together.

13. Deliver completed FORMS 1, 2 and 3 to the principal. Include FORM 4 (BLUE), the Teacher Opinionnaire.

FORM 4 (BLUE) - Program Opinionnaire

To be completed by the teacher. We also want teacher opinions about the program on handicapped persons that was presented in class. Additional comments will be appreciated.

FORM 5 (YELLOW) - Post Test

FORM 5 is the same as FORM 1 and is to be administered to ALL students in the class approximately ONE MONTH later. The purpose of the post test is to measure retention or change of attitudes.

Please go over the instructions and examples in FORM 5 as before. Ask the students to complete the General Information page again before doing the Student Attitudes Toward Handicapped Scale. Question 40 on the Attitudes Scale will indicate which students had completed this questionnaire before and which had not. This information is important.

Collect the completed forms and return to the principal.

Mr. Lee Bussard will make the necessary arrangements for collecting the completed forms (questionnaires) and project materials.

Thank you and your students once again for your cooperation and participation in this study project.

STUDENT ATTITUDES TOWARD HANDICAPPED PROJECT

(Group C Schools)

INSTRUCTIONS FOR COMPLETING FORM 6 QUESTIONNAIRE

Thank you for participating in this project and assisting us in determing how Alberta students feel about handicapped or disabled people. Your school is one of many schools which have been randomly selected to take part in this study about handicapped persons. Your are asked to complete the General Information sheet and the Student Attitudes Toward Handicapped Scale which follows. Your teacher will go over the instructions and examples with you so that you will know how to record your answers. Your answers will be combined with those of many other students to provide the information needed.

Do not put your name on the form. Your answers will be treated anonymously. This is not a test. There are no RIGHT or WRONG answers. We are only interested in your opinions and how you feel about handicapped people. Work quickly. Your first impressions or feelings are often the best ones to record. Please follow the instructions and answer every item. Use a pencil.

Instructions to the Teacher

Your school has been randomly selected as one of the Group C schools for this study. Group C schools are the control group or the "no program" group. This means that the students in your class have not been exposed to any programs and discussions about handicapped persons and have not received any prior information of any kind which might influence their thinking or attitudes. Hence, their responses to the items in the Student Attitudes Toward Handicapped Scale should reflect pure impressions and opinions which are indicative of how students in Alberta generally feel about handicapped or disabled people.

Please proceed as follows:

1. Have all students complete the General Information page on the front of the form following the instructions given.

2. Go over the instructions and examples for completing the Student Attitudes Toward Handicapped Scale. Let students begin.

3. Please check to make certain that students are placing the NUMBER of their answer in the space to the left of each item according to instructions.

4. Allow time for all students to complete all items.

5. Collect completed forms and return to the principal.

Thank you and your students once again for your cooperation and participation in this study project.

GENERAL INFORMATION

FORM 1 (GREEN)

1 1. Form

2. Age

(1) 10 to 12
(2) 13 to 15
(3) 16 to 19

3. Grade

(1) 6
(2) 8
(3) 11

4. Sex

(1) Boy
(2) Girl

5. Where do you live?

(1) Large city (Edmonton or Calgary)
(2) Small city
(3) Town, village or hamlet
(4) Farm or other rural location

6. Are you aware of or have you seen any handicapped persons who live near you? (in your town or community)

(1) Yes
(2) No

7. How well do you know a handicapped or disabled person?

(1) Very well
(2) Fairly well
(3) Not at all

8. Is there a handicapped person (boy, girl, teacher) in your school?

(1) Yes
(2) No
(3) Don't know

9. Which program on handicapped people did you see and hear in your school?

(1) Slides and talk by Mr. Lee Bussard
(2) T.V. program and discussion by your teacher
(3) No program

Instructions

To be completed by all students. Place the number of your answer in the space to the left of each item.

Example:

2 1. Color of your eyes.

(1) blue
(2) brown
(3) red

The number "2" in the space indicates the color brown. Complete every item. Please use pencil.

STUDENT ATTITUDES TOWARD HANDICAPPED SCALE

FORM 1 (GREEN)

INSTRUCTIONS

The statements about handicapped or disabled people which you are asked to respond to represent things with which some people agree and some don't agree. You will probably agree with some and disagree with others. We are interested in finding out how you feel about each statement and how much you agree or disagree with it. This is not a test. There are no "right" or "wrong" answers. Read each statement carefully. Then, in the space to the left of each statement, write the NUMBER of the answer which you feel best describes how much you agree or disagree with the statement. Using the scale given below, write 1, 2, 3, 4, 5 or 6 in the space, depending on how you feel in each case. Please work quickly. The first answer that you think about is usually the best one.

1 - STRONGLY DISAGREE

2 - DISAGREE

3 - NOT SURE BUT PROBABLY DISAGREE

4 - NOT SURE BUT PROBABLY AGREE

5 - AGREE

6 - STRONGLY AGREE

Here are some examples:

Example 1

__6__ 1. Boys are smarter than girls.

(The number "6" indicates that you "strongly agree.")

Example 2

__2__ 2. All dogs hate cats.

(The number "2" indicates that you "disagree.")

Example 3

__4__ 3. Vitamin C helps to cure a cold.

(The number "4" indicates that you are "not sure but probably agree.")

Please note: The words HANDICAPPED and DISABLED mean the same thing. Please answer every item. Turn the page and begin.

STUDENT ATTITUDES SCALE

FORM 1 (GREEN)

1 - STRONGLY DISAGREE
2 - DISAGREE
3 - NOT SURE BUT PROBABLY DISAGREE
4 - NOT SURE BUT PROBABLY AGREE
5 - AGREE
6 - STRONGLY AGREE

****

_____ 10. Handicapped persons are often unfriendly.

_____ 11. Disabled people should not have to compete for jobs with physically normal persons.

_____ 12. Handicapped people are more emotional than other people.

_____ 13. Most handicapped people are more self-conscious than other people.

_____ 14. We should expect just as much from the handicapped as from non-handicapped persons.

_____ 15. Disabled workers cannot be as successful as other workers.

_____ 16. Handicapped or disabled persons usually do not make much of a contribution to society.

_____ 17. Most non-disabled people would not want to marry a physically disabled person.

_____ 18. Handicapped people show as much enthusiasm as other people.

_____ 19. Handicapped persons are usually more sensitive (touchy) than other people.

_____ 20. Severely disabled persons are usually untidy.

_____ 21. Most handicapped people feel that they are as good as other people.

_____ 22. The driving test given to a disabled person should be more severe (strict or harder) than the one given to the non-disabled.

_____ 23. Handicapped persons are usually sociable.

_____ 24. Disabled persons usually are not as conscientious as physically normal persons.

_____ 25. Severely disabled persons probably worry more about their health than those who have minor disabilities.

_____ 26. Most handicapped people are not dissatisfied (displeased) with themselves.

_____ 27. There are more misfits among disabled people than among non-disabled people.

_____ 28. Most handicapped people do not get discouraged easily.

_____ 29. Most disabled persons resent (take offense at) physically normal people.

STUDENT ATTITUDES SCALE (cont'd)

FORM 1 (GREEN)

1 - STRONGLY DISAGREE
2 - DISAGREE
3 - NOT SURE BUT PROBABLY DISAGREE
4 - NOT SURE BUT PROBABLY AGREE
5 - AGREE
6 - STRONGLY AGREE

****

_____ 30. Disabled children should compete with physically normal children.

_____ 31. Most handicapped persons can take care of themselves.

_____ 32. It would be best if handicapped people would live and work with normal people.

_____ 33. Most severely disabled people are just as ambitious as physically normal people.

_____ 34. Handicapped persons are just as self-confident as other people.

_____ 35. Most handicapped people want more affection (love) and praise than other people.

_____ 36. Physically disabled persons are often less intelligent than non-disabled ones.

_____ 37. Most handicapped people are different from people who are not handicapped.

_____ 38. Disabled persons don't want any more sympathy than other people.

_____ 39. The way handicapped people act is irritating (annoying).

GENERAL INFORMATION

FORM 2 (WHITE)

2 1. Form

____ 2. Age

(1) 10 to 12
(2) 13 to 15
(3) 16 to 19

____ 3. Grade

(1) 6
(2) 8
(3) 11

____ 4. Sex

(1) Boy
(2) Girl

____ 5. Where do you live?

(1) Large city (Edmonton or Calgary)
(2) Small city
(3) Town, village or hamlet
(4) Farm or other rural location

____ 6. Are you aware of or have you seen any handicapped persons who live near you? (in your town or community)

(1) Yes
(2) No

____ 7. How well do you know a handicapped or disabled person?

(1) Very well
(2) Fairly well
(3) Not at all

____ 8. Is there a handicapped person (boy, girl, teacher) in your school?

(1) Yes
(2) No
(3) Don't know

____ 9. Which program on handicapped people did you see and hear in your school?

(1) Slides and talk by Mr. Lee Bussard
(2) T.V. program and discussion by your teacher
(3) No program

Instructions

To be completed by all students. Place the number of your answer in the space to the left of each item.

Example:

2 1. Color of your eyes.

(1) blue
(2) brown
(3) red

The number "2" in the space indicates the color brown. Complete every item. Please use pencil.

PROGRAM ATTITUDE SCALES

FORM 2 (WHITE)

INSTRUCTIONS

How students feel about the program that was presented about handicapped or disabled persons is very important. You are asked to rate it by placing the NUMBER of your answer in the space to the left of each pair of words. This is not a test. There are no RIGHT or WRONG answers. The important thing is to tell how you feel about the program which was presented to you in class by rating it according to the following scale.

very much	a bit	neither	a bit	very much
1	2	3	4	5

Here are four examples of rating:

In example 1, the color of this page is rated as "5" since the page is very much white. In example 2, the color of the words printed on this page is rated as "1" since the color of the print is very much black.

Example 1

		very much	a bit	neither	a bit	very much	
5	Black	1	2	3	4	5	White

Example 2

		very much	a bit	neither	a bit	very much	
1	Black	1	2	3	4	5	White

In example 3, the color dark grey is rated as "2" since dark grey is a bit black.

In example 4, the color red is rated as "3". Since the color red is neither black nor white. A grey exactly half way between black and white would be rated "3" (neither).

Example 3

		very much	a bit	neither	a bit	very much	
2	Black	1	2	3	4	5	White

Example 4

		very much	a bit	neither	a bit	very much	
3	Black	1	2	3	4	5	White

School subjects are rated in the same way. For example, here is a rating of a school subject--social studies.

Social Studies

		very much	a bit	neither	a bit	very much	
2	nice	1	2	3	4	5	awful
5	boring	1	2	3	4	5	interesting
3	unpleasant	1	2	3	4	5	pleasant

The student felt that social studies was a bit nice "2"; very much interesting "5"; and neither pleasant nor unpleasant "3".

Remember that you are going to rate the program that was presented to you about handicapped (disabled) persons. Please work quickly. It is better to give your first feelings rather than to think too hard about each pair of words.

Please rate every item. Turn the page and begin.

THE PROGRAM ABOUT HANDICAPPED PERSONS

FORM 2 (WHITE)

			very much	a bit	neither	a bit	very much	
____	10.	nice	1	2	3	4	5	awful
____	11.	boring	1	2	3	4	5	interesting
____	12.	unpleasant	1	2	3	4	5	pleasant
____	13.	dislike	1	2	3	4	5	like
____	14.	bright	1	2	3	4	5	dull
____	15.	dead	1	2	3	4	5	alive
____	16.	lively	1	2	3	4	5	listless (inactive, lazy)
____	17.	exciting	1	2	3	4	5	tiresome (makes a person tired)
____	18.	useless	1	2	3	4	5	useful
____	19	important	1	2	3	4	5	unimportant
____	20.	impractical	1	2	3	4	5	practical (useful or workable)
____	21.	worthless	1	2	3	4	5	valuable
____	22.	helpful	1	2	3	4	5	unhelpful
____	23.	unnecessary	1	2	3	4	5	necessary
____	24.	harmful	1	2	3	4	5	advantageous (brings good or gain)
____	25.	meaningful	1	2	3	4	5	meaningless (doesn't make sense)
____	26.	hard	1	2	3	4	5	easy
____	27.	light	1	2	3	4	5	heavy (a lot of work)
____	28.	clear	1	2	3	4	5	confusing (mixes a person up)
____	29.	complicated	1	2	3	4	5	simple
____	30.	elementary	1	2	3	4	5	advanced (beyond the beginning level)
____	31.	strange	1	2	3	4	5	familiar
____	32.	understandable	1	2	3	4	5	puzzling (hard to understand)
____	33.	undemanding	1	2	3	4	5	rigorous (has to be exactly right)

GENERAL INFORMATION

FORM 3 (PINK)

3 1. Form

____ 2. Age

(1) 10 to 12
(2) 13 to 15
(3) 16 to 19

____ 3. Grade

(1) 6
(2) 8
(3) 11

____ 4. Sex

(1) Boy
(2) Girl

____ 5. Where do you live?

(1) Large city (Edmonton or Calgary)
(2) Small city
(3) Town, village or hamlet
(4) Farm or other rural location

____ 6. Are you aware of or have you seen any handicapped persons who live near you? (in your town or community)

(1) Yes
(2) No

____ 7. How well do you know a handicapped or disabled person?

(1) Very well
(2) Fairly well
(3) Not at all

____ 8. Is there a handicapped person (boy, girl, teacher) in your school?

(1) Yes
(2) No
(3) Don't know

____ 9. Which program on handicapped people did you see and hear in your school?

(1) Slides and talk by Mr. Lee Bussard
(2) T.V. program and discussion by your teacher
(3) No program

Instructions

To be completed by all students. Place the number of your answer in the space to the left of each item.

Example:

2 1. Color of your eyes.

(1) blue
(2) brown
(3) red

The number "2" in the space indicates the color brown. Complete every item. Please use pencil.

PROGRAM EVALUATION OPINIONNAIRE

FORM 3 (PINK)

INSTRUCTIONS

The following statements are designed to find out your OPINION about the total program on handicapped or disabled persons which was presented in your class. Read each statement and decide whether you agree or disagree. Then decide how much you agree or disagree and place the NUMBER of your answer in the space to the left of each statement. Use the following scale:

1 - STRONGLY DISAGREE

2 - DISAGREE

3 - AGREE

4 - STRONGLY AGREE

Here are some examples:

Example 1

__3__ 1. Milk is my favorite drink.

(If you "agree" with the statement you would place a "3" in the space.

Example 2

__1__ 2. A Ford is the best car made.

(If you "strongly disagree" with the statement, you would place a "1" in the space.)

Complete every one. Turn the page and begin.

OPINIONNAIRE

FORM 3 (PINK)

1 - STRONGLY DISAGREE

2 - DISAGREE

3 - AGREE

4 - STRONGLY AGREE

****

_____ 10. The program increased my general knowledge about handicapped (disabled) people.

_____ 11. It was a very worthwhile program.

_____ 12. More school subjects should be taught this way.

_____ 13. I would prefer a different method of instruction.

_____ 14. The pictures and discussion used in the program were easy to follow.

_____ 15. Some things were not explained very well.

_____ 16. The program held my attention.

_____ 17. Generally, the material and information presented were well organized.

_____ 18. There was not enough student participation for this type of program.

_____ 19. More outside reading is necessary.

_____ 20. The pace of the program was too slow.

_____ 21. There was not enough time to cover the subject thoroughly.

Comments:

If you have any comments or suggestions you would like to make about the program, please add them below or on the back of this page.

PROGRAM EVALUATION OPINIONNAIRE

FORM 4 (BLUE)
[For classroom
TEACHER use]

INSTRUCTIONS

The following statements are designed to find out your OPINION about the total program on handicapped or disabled persons which was presented in your class. Read each statement and decide whether you agree or disagree. Then decide how much you agree or disagree and place the NUMBER of your answer in the space to the left of each statement. Use the following scale:

1 - STRONGLY DISAGREE
2 - DISAGREE
3 - AGREE
4 - STRONGLY AGREE

Here are some examples:

Example 1

_3_ 1. Milk is my favorite drink.

(If you "agree" with the statement you would place a "3" in the space.

Example 2

_1_ 2. A Ford is the best car made.

(If you "strongly disagree" with the statement, you would place a "1" in the space.)

Complete every one. Turn the page and begin.

OPINIONNAIRE

FORM 4 (BLUE)

1 - STRONGLY DISAGREE

2 - DISAGREE

3 - AGREE

4 - STRONGLY AGREE

****

4 1. Form

____ 2. Which program on handicapped persons was presented to your class? (Indicate by placing the number of your answer in the space to the left).

(1) Slides and talk by Mr. Lee Bussard.

(2) T.V. program and discussion by the teacher.

____ 3. The program increased my general knowledge about handicapped (disabled) people.

____ 4. It was a very worthwhile program.

____ 5. More school subjects should be taught this way.

____ 6. I would prefer a different method of instruction.

____ 7. The pictures and discussion used in the program were easy to follow.

____ 8. Some things were not explained very well.

____ 9. The program held my attention.

____ 10. Generally, the material and information presented were well organized.

____ 11. There was not enough student participation for this type of program.

____ 12. More outside reading is necessary.

____ 13. The pace of the program was too slow.

____ 14. There was not enough time to cover the subject thoroughly.

Comments:

If you have any comments or suggestions you would like to make about the program, please add them below or on the back of this page.

GENERAL INFORMATION

FORM 5 (YELLOW)
[POST TEST]

5 1. Form

____ 2. Age

(1) 10 to 12
(2) 13 to 15
(3) 16 to 19

____ 3. Grade

(1) 6
(2) 8
(3) 11

____ 4. Sex

(1) Boy
(2) Girl

____ 5. Where do you live?

(1) Large city (Edmonton or Calgary)
(2) Small city
(3) Town, village or hamlet
(4) Farm or other rural location

____ 6. Are you aware of or have you seen any handicapped persons who live near you? (in your town or community)

(1) Yes
(2) No

____ 7. How well do you know a handicapped or disabled person?

(1) Very well
(2) Fairly well
(3) Not at all

____ 8. Is there a handicapped person (boy, girl, teacher) in your school?

(1) Yes
(2) No
(3) Don't know

____ 9. Which program on handicapped people did you see and hear in your school?

(1) Slides and talk by Mr. Lee Bussard
(2) T.V. program and discussion by your teacher
(3) No program

Instructions

To be completed by all students. Place the number of your answer in the space to the left of each item.

Example:

2 1. Color of your eyes.

(1) blue
(2) brown
(3) red

The number "2" in the space indicates the color brown. Complete every item. Please use pencil.

STUDENT ATTITUDES TOWARD HANDICAPPED SCALE

FORM 5 (YELLOW)

Some students completed the Student Attitudes Toward Handicapped Scale FORM 1 (GREEN) approximately one month ago, after the program about handicapped persons was presented in your class. Other students did not. Regardless of whether you did or did not, all students are now asked to complete the Attitudes Scale in accordance with the instructions below.

INSTRUCTIONS

The statements about handicapped or disabled people which you are asked to respond to represent things with which some people agree and some don't agree. You will probably agree with some and disagree with others. We are interested in finding out how you feel about each statement and how much you agree or disagree with it. This is not a test. There are no "right" or "wrong" answers. Read each statement carefully. Then, in the space to the left of each statement, write the NUMBER of the answer which you feel best describes how much you agree or disagree with the statement. Using the scale given below, write 1, 2, 3, 4, 5 or 6 in the space, depending on how you feel in each case. Please work quickly. The first answer that you think about is usually the best one.

1 - STRONGLY DISAGREE

2 - DISAGREE

3 - NOT SURE BUT PROBABLY DISAGREE

4 - NOT SURE BUT PROBABLY AGREE

5 - AGREE

6 - STRONGLY AGREE

Here are some examples:

Example 1

__6__ 1. Boys are smarter than girls.

(The number "6" indicates that you "strongly agree.")

Example 2

__2__ 2. All dogs hate cats.

(The number "2" indicates that you "disagree.")

Example 3

__4__ 3. Vitamin C helps to cure a cold.

(The number "4" indicates that you are "not sure but probably agree.")

Please note: The words HANDICAPPED and DISABLED mean the same thing. Please answer every item. Turn the page and begin.

STUDENT ATTITUDES SCALE

FORM 5 (YELLOW)

1 - STRONGLY DISAGREE
2 - DISAGREE
3 - NOT SURE BUT PROBABLY DISAGREE
4 - NOT SURE BUT PROBABLY AGREE
5 - AGREE
6 - STRONGLY AGREE

****

_____ 10. Handicapped persons are often unfriendly.

_____ 11. Disabled people should not have to compete for jobs with physically normal persons.

_____ 12. Handicapped people are more emotional than other people.

_____ 13. Most handicapped people are more self-conscious than other people.

_____ 14. We should expect just as much from the handicapped as from non-handicapped persons.

_____ 15. Disabled workers cannot be as successful as other workers.

_____ 16. Handicapped or disabled persons usually do not make much of a contribution to society.

_____ 17. Most non-disabled people would not want to marry a physically disabled person.

_____ 18. Handicapped people show as much enthusiasm as other people.

_____ 19. Handicapped persons are usually more sensitive (touchy) than other people.

_____ 20. Severely disabled persons are usually untidy.

_____ 21. Most handicapped people feel that they are as good as other people.

_____ 22. The driving test given to a disabled person should be more severe (strict or harder) than the one given to the non-disabled.

_____ 23. Handicapped persons are usually sociable.

_____ 24. Disabled persons usually are not as conscientious as physically normal persons.

_____ 25. Severely disabled persons probably worry more about their health than those who have minor disabilities.

_____ 26. Most handicapped people are not dissatisfied (displeased) with themselves.

_____ 27. There are more misfits among disabled people than among non-disabled people.

_____ 28. Most handicapped people do not get discouraged easily.

_____ 29. Most disabled persons resent (take offense at) physically normal people.

STUDENT ATTITUDES SCALE (cont'd)

FORM 5 (YELLOW)

1 - STRONGLY DISAGREE
2 - DISAGREE
3 - NOT SURE BUT PROBABLY DISAGREE
4 - NOT SURE BUT PROBABLY AGREE
5 - AGREE
6 - STRONGLY AGREE

****

_____ 30. Disabled children should compete with physically normal children.

_____ 31. Most handicapped persons can take care of themselves.

_____ 32. It would be best if handicapped people would live and work with normal people.

_____ 33. Most severely disabled people are just as ambitious as physically normal people.

_____ 34. Handicapped persons are just as self-confident as other people.

_____ 35. Most handicapped people want more affection (love) and praise than other people.

_____ 36. Physically disabled persons are often less intelligent than non-disabled ones.

_____ 37. Most handicapped people are different from people who are not handicapped.

_____ 38. Disabled persons don't want any more sympathy than other people.

_____ 39. The way handicapped people act is irritating (annoying).

_____ 40. Did you complete this questionnaire (Attitudes Scale) before? (Indicate by placing the number of your answer in the space to the left).

(1) Yes
(2) No

GENERAL INFORMATION

FORM 6 (SALMON)

6 1. Form

2. Age

(1) 10 to 12
(2) 13 to 15
(3) 16 to 19

3. Grade

(1) 6
(2) 8
(3) 11

4. Sex

(1) Boy
(2) Girl

5. Where do you live?

(1) Large city (Edmonton or Calgary)
(2) Small city
(3) Town, village or hamlet
(4) Farm or other rural location

6. Are you aware of or have you seen any handicapped persons who live near you? (in your town or community)

(1) Yes
(2) No

7. How well do you know a handicapped or disabled person?

(1) Very well
(2) Fairly well
(3) Not at all

8. Is there a handicapped person (boy, girl, teacher) in your school?

(1) Yes
(2) No
(3) Don't know

9. Which program on handicapped people did you see and hear in your school?

(1) Slides and talk by Mr. Lee Bussard
(2) T.V. program and discussion by your teacher
(3) No program

Instructions

To be completed by all students. Place the number of your answer in the space to the left of each item.

Example:

2 1. Color of your eyes.

(1) blue
(2) brown
(3) red

The number "2" in the space indicates the color brown. Complete every item. Please use pencil.

STUDENT ATTITUDES TOWARD HANDICAPPED SCALE

FORM 6 (SALMON)

INSTRUCTIONS

The statements about handicapped or disabled people which you are asked to respond to represent things with which some people agree and some don't agree. You will probably agree with some and disagree with others. We are interested in finding out how you feel about each statement and how much you agree or disagree with it. This is not a test. There are no "right" or "wrong" answers. Read each statement carefully. Then, in the space to the left of each statement, write the NUMBER of the answer which you feel best describes how much you agree or disagree with the statement. Using the scale given below, write 1, 2, 3, 4, 5 or 6 in the space, depending on how you feel in each case. Please work quickly. The first answer that you think about is usually the best one.

1 - STRONGLY DISAGREE
2 - DISAGREE
3 - NOT SURE BUT PROBABLY DISAGREE
4 - NOT SURE BUT PROBABLY AGREE
5 - AGREE
6 - STRONGLY AGREE

Here are some examples:

Example 1

__6__ 1. Boys are smarter than girls.

(The number "6" indicates that you "strongly agree.")

Example 2

__2__ 2. All dogs hate cats.

(The number "2" indicates that you "disagree.")

Example 3

__4__ 3. Vitamin C helps to cure a cold.

(The number "4" indicates that you are "not sure but probably agree.")

Please note: The words HANDICAPPED and DISABLED mean the same thing. Please answer every item. Turn the page and begin.

STUDENT ATTITUDES SCALE

FORM 6 (SALMON)

1 - STRONGLY DISAGREE
2 - DISAGREE
3 - NOT SURE BUT PROBABLY DISAGREE
4 - NOT SURE BUT PROBABLY AGREE
5 - AGREE
6 - STRONGLY AGREE

****

_____ 10. Handicapped persons are often unfriendly.

_____ 11. Disabled people should not have to compete for jobs with physically normal persons.

_____ 12. Handicapped people are more emotional than other people.

_____ 13. Most handicapped people are more self-conscious than other people.

_____ 14. We should expect just as much from the handicapped as from non-handicapped persons.

_____ 15. Disabled workers cannot be as successful as other workers.

_____ 16. Handicapped or disabled persons usually do not make much of a contribution to society.

_____ 17. Most non-disabled people would not want to marry a physically disabled person.

_____ 18. Handicapped people show as much enthusiasm as other people.

_____ 19. Handicapped persons are usually more sensitive (touchy) than other people.

_____ 20. Severely disabled persons are usually untidy.

_____ 21. Most handicapped people feel that they are as good as other people.

_____ 22. The driving test given to a disabled person should be more severe (strict or harder) than the one given to the non-disabled.

_____ 23. Handicapped persons are usually sociable.

_____ 24. Disabled persons usually are not as conscientious as physically normal persons.

_____ 25. Severely disabled persons probably worry more about their health than those who have minor disabilities.

_____ 26. Most handicapped people are not dissatisfied (displeased) with themselves.

_____ 27. There are more misfits among disabled people than among non-disabled people.

_____ 28. Most handicapped people do not get discouraged easily.

_____ 29. Most disabled persons resent (take offense at) physically normal people.

STUDENT ATTITUDES SCALE (cont'd)

FORM 6 (SALMON)

1 - STRONGLY DISAGREE
2 - DISAGREE
3 - NOT SURE BUT PROBABLY DISAGREE
4 - NOT SURE BUT PROBABLY AGREE
5 - AGREE
6 - STRONGLY AGREE

****

_____ 30. Disabled children should compete with physically normal children.

_____ 31. Most handicapped persons can take care of themselves.

_____ 32. It would be best if handicapped people would live and work with normal people.

_____ 33. Most severely disabled people are just as ambitious as physically normal people.

_____ 34. Handicapped persons are just as self-confident as other people.

_____ 35. Most handicapped people want more affection (love) and praise than other people.

_____ 36. Physically disabled persons are often less intelligent than non-disabled ones.

_____ 37. Most handicapped people are different from people who are not handicapped.

_____ 38. Disabled persons don't want any more sympathy than other people.

_____ 39. The way handicapped people act is irritating (annoying).

APPENDIX D

Correspondence

Alberta

EDUCATION

Devonian Building, West Tower
11160 Jasper Avenue
Edmonton, Alberta, Canada
T5K 0L2

October 5, 1979

School Board Chairmen

Dear Sir or Madam:

Re: Student Attitudes Toward the Handicapped Project

I wish to acquaint you with a project designed to explore student attitudes toward handicapped persons. This is a study which will be conducted in Alberta schools using a random selection approach. The project is being funded jointly by Alberta Education and Alberta Social Services and Community Health and is sponsored by the Wetaskiwin School District #0264. Mr. Lee Bussard of Wetaskiwin, who is himself a handicapped person, will coordinate much of the project. He will personally visit schools with a slide presentation and speak to students about handicapped people.

Your cooperation in facilitating the participation of students and teachers in the schools selected from your system will be appreciated. If participation in this project should present any problems to you or to school personnel, please contact:

Planning and Research Branch
Alberta Education
Devonian Building
11160 Jasper Avenue
EDMONTON, Alberta
T5K 0L2
Phone: 427-2991

Further information and details relevant to the project will be forthcoming.

Thank you for giving this matter your attention.

Yours sincerely,

E. K. Hawkesworth

E. K. Hawkesworth
Deputy Minister

cc: Superintendents of Schools

Alberta

EDUCATION

Devonian Building, West Tower
11160 Jasper Avenue
Edmonton, Alberta, Canada
T5K 0L2

November 5, 1979

Superintendents of Schools
Principals of Participating Schools

Dear Sir:

RE: STUDENT ATTITUDES TOWARD THE HANDICAPPED PROJECT

The letter from Dr. E.K. Hawkesworth, Deputy Minister of Education, has briefly acquainted you with the above-named project and requests your cooperation in facilitating the participation of students and teachers of schools in your jurisdiction which have been randomly selected for the study. Additional information and details concerning this project are provided below.

Background

The project on Student Attitudes Toward the handicapped is sponsored by the Wetaskiwin School District No. 0264 and is jointly funded by Alberta Education and Alberta Social Services and Community Health. Mr. Lee Bussard of Wetaskiwin, who is himself a handicapped person, will coordinate much of the project in cooperation with the Planning and Research Branch of Alberta Education who assisted in the development of the research design. Mr. Bussard will personally visit selected schools and present one of the program approaches being studied.

Purpose of the Project/Study

To explore student awareness of and attitudes toward handicapped (disabled) persons through the use of class presentations and to assess the effects of such presentations by questionnaires in randomly selected schools in Zones 2, 3 and 4.

. . . 2

Expected Outcomes

1. To learn how knowledgeable students are about handicapped persons.

2. To discover the effects or changes in student attitudes toward the handicapped after being exposed to programs and discussions about handicapped or disabled people.

Research Design

It is planned to evaluate two types of programs or class presentations which have been designed to make students more aware of and better informed about handicapped people. One presentation, consisting of slides and a talk, will be presented by Mr. Lee Bussard to one group (Group B Schools) of randomly selected schools. The second presentation, consisting of a T.V. (video-tape) program and class discussion, will be presented by the classroom teacher to a second group (Group T Schools) of selected schools. Each of the presentations will require forty minutes of class time. If convenient, the time may be extended.

Since an experimental design evaluating the impact of these programs is being used, a third group (Group C Schools) of schools will be selected as a control group. This is a "no program" group. Students from these schools will not be exposed to any of the two presentations and will not receive any prior information about handicapped persons. Students from all three groups of schools will be asked to complete questionnaires about handicapped people and the programs presented in class. This will require about twenty minutes.

The study will involve students from grades 6, 8 and 11. The principal will select ONE class only from each of these grades. Two classes may be combined if the enrolment in one is low. Teachers of the selected classes will be asked to administer the questionnaires to the students. In those schools where programs were presented, i.e. Groups B and T, a second administration of one of the questionnaires as a post test will be required about one month later in order to measure retention or any change in attitudes.

The questionnaires or instruments to be used in this study are as follows:

FORM 1 (GREEN)

(1) General information questionnaire.
(2) Student Attitudes Toward Handicapped Scale.

FORM 2 (WHITE)

(1) General information questionnaire.
(2) Program Attitude Rating Scale.

. . . 3

FORM 3 (PINK)

(1) General information questionnaire.
(2) Program Evaluation Opinionnaire.

FORM 4 (BLUE)

- for Teacher use.
- Program Evaluation Opinionnaire.

FORM 5 (YELLOW) - POST TEST - Group B and T Schools.

- same as FORM 1. To be administered ONE MONTH later to the same students in grades 6, 8 and 11 who participated in the study.

Forms 1, 2 and 3 will be completed by students from those schools where presentations were given, i.e. Group B and T schools. These will be administered by the teacher within a day or two after the classroom presentation.

Form 4 is to be completed by the classroom teacher.

Form 5 (Post test) will be administered as a post test about one month later in the Group B and T schools.

Students in the "no program" schools (Group C - control group) will complete Form 6 only (same as Form 1).

The attached sheet indicates the school(s) in your jurisdiction which have been randonly selected for either one of the two program groups or for the control (no program) group.

Mr. Lee Bussard, Coordinator of the project, will be contacting the schools in order to arrange suitable dates for the presentations and for delivery of project materials.

If further information is required, please contact Mr. Peter J. Baker, Planning and Research Branch, Alberta Education, Devonian Building, 11160 Jasper Avenue, Edmonton, T5K 0L2 (Ph. 427-8215).

Your cooperation and assistance in facilitating the participation of students and teachers in this project is greatly appreciated.

Yours sincerely,

P.J. Baker
Education Consultant
Planning and Research Branch

SCHOOLS SELECTED FOR PROJECT

The following schools have been randomly selected to participate in one of the three programs associated with the project. Grades 6, 8 and 11 students will be involved. The principal will select ONE class only from each of these grades. The schools fall into one of three categories or groups, namely, Group B, Group T or Group C. The specific program associated with each group is as follows:

Group B Program

1. Slides and talk presented by Mr. Lee Bussard.

2. Questionnaire Forms 1, 2, 3 to be completed by the students and Form 4 to be completed by the teacher after the presentation.

3. Form 5 (post test) to be completed by students one month later.

Group T Program

1. T.V. (videotape) program and discussion presented by classroom teacher.

2. Questionnaire Forms 1, 2, 3 to be completed by the students and Form 4 to be completed by the teacher after the presentation.

3. Form 5 (post test) to be completed by students one month later.

Group C Program

1. Control group - no program.

2. Questionnaire Form 6 to be completed by students.

The following information is provided:

1. Name of the school.

2. Program group (B, T or C).

3. Grade(s).

HOFSTRA UNIVERSITY HEMPSTEAD, NEW YORK 11550

Office of the Provost and Dean of Faculties

July 22, 1980

Mr. Peter J. Baker, Education Consultant
Planning and Research
Alberta Education
Devonian Building, West Tower
11160 Jasper Avenue
Edmonton, Alberta, Canada T5K OL2

Dear Mr. Baker:

Thank you for your recent letter about the ATDP. Your project sounds quite interesting.

I am enclosing a reprint of the major part of our monograph describing the attitude toward disabled persons scale. I hope that this will give you all the information you need.

You certainly have my permission to use the ATDP. I would appreciate your keeping me informed of any result obtained with it.

If there is any other way in which I can be of help, please contact me.

Sincerely,

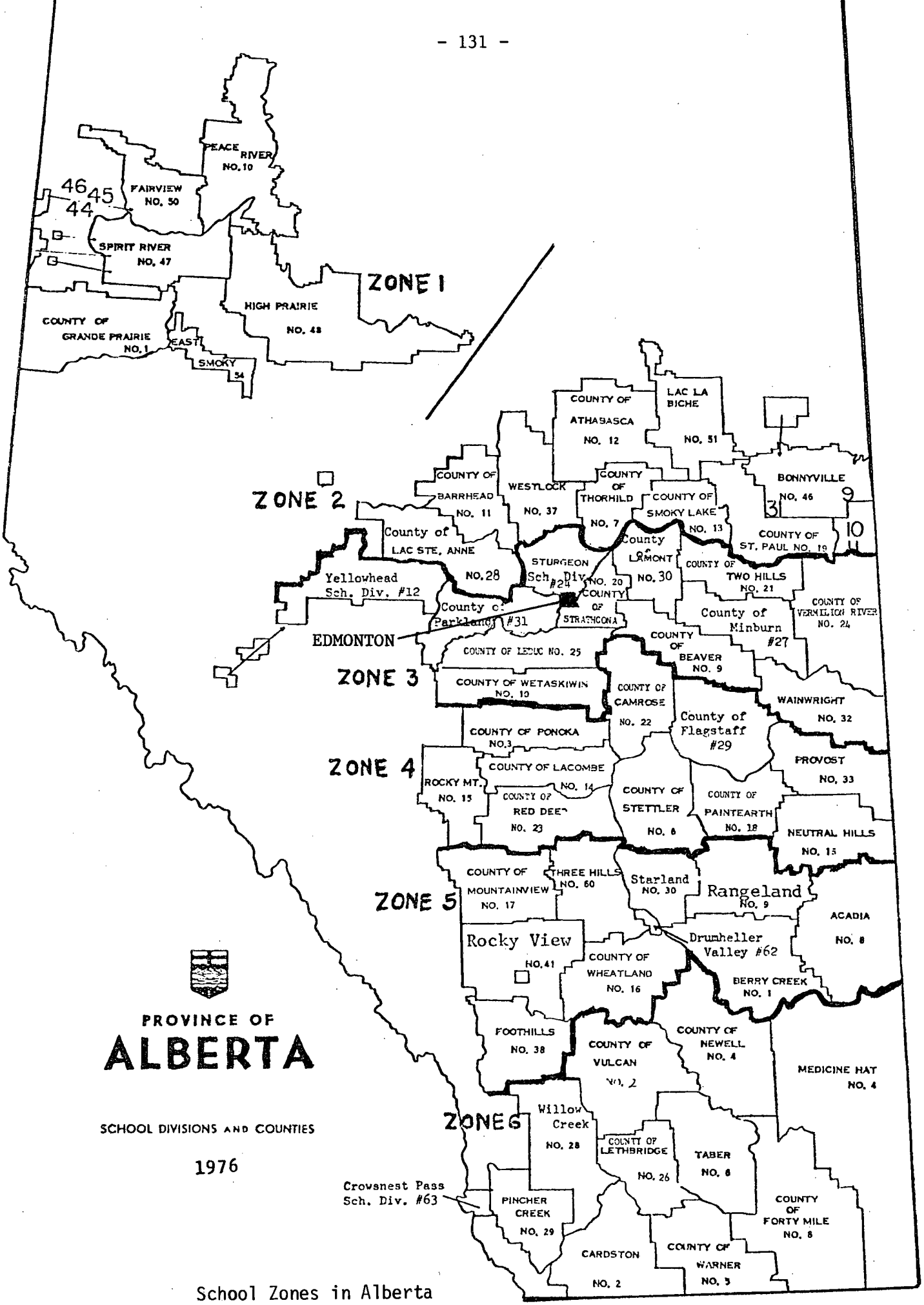
Harold E. Yuker

Harold E. Yuker, Ph.D.
Provost and Dean of Faculties

HEY:vh
enclosures

APPENDIX E

Map of Alberta Indicating Education Zones



School Zones in Alberta